

## ORAL ARGUMENT NOT YET SCHEDULED

No. 22-7063

UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

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

v.

PUBLIC.RESOURCE.ORG, INC.,  
Appellee

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

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**PUBLIC APPENDIX**  
**VOLUME 8 (JA4848-JA7295)**  
**MATERIAL UNDER SEAL IN SEPARATE SUPPLEMENT**

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**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

C518-1991 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 15 of 123](#) Standard Test Method for Steady State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

C518-2004 [i](#)

Current Active Version: C518-2017 [i](#)

C530-1970(1975) [i](#) Standard Specification for Structural Clay Non-Load-Bearing Screen Tile

C530-1970(1986) [i](#)

Current Active Version: C530-2013(2017) [i](#)

C533-1985(1990) [i](#) Standard Specification for Calcium Silicate Block and Pipe Thermal Insulation

Current Active Version: C533-2017 [i](#)

C534-1988 [i](#) Standard Specification for Performed Flexible Elastomeric Cellular Thermal Insulation in Sheet and Tubular Form

Current Active Version: C534/C534M-2019 [i](#)

C547-1977 [i](#) Standard Specification for Mineral Fiber Preformed Pipe Insulation

Current Active Version: C547-2017 [i](#)

C549-1973 [i](#) Standard Specification for Perlite Loose Fill Insulation

C549-1981(1986) [i](#)

Current Active Version: C549-2018 [i](#)

C552-1988 [i](#) Standard Specification for Cellular Glass Thermal Insulation

Current Active Version: C552-2017e1 [i](#)

C553-1970(1977) [i](#) Standard Specification for Mineral Fiber Blanket And Felt Insulation (Industrial Type)

Current Active Version: C553-2013 [i](#)

C564-1970 [i](#) Standard Specification for Rubber Gaskets For Cast Iron Soil Pipe And Fittings

C564-1970(1976) [i](#)

C564-1988 [i](#)

C564-1997 [i](#)



Current Active Version: C564-2014 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 46 of 123](#)

C570-1972(1989)e1 [i](#) Standard Specification for Oil- and Resin-Base Caulking Compound for Building Construction

C578-1987a [i](#) Standard Specification for Preformed, Cellular Polystyrene Thermal Insulation

C578-1992 [i](#)

Current Active Version: C578-2019 [i](#)

C587-1968 [i](#) Standard Specifications For Gypsum Veneer Plaster

Current Active Version: C587-2004(2018) [i](#)

C588-1980 [i](#) Standard Specification for Gypsum Base For Veneer Plasters

Replaced By: C1396/C1396M [i](#)

C591-1985 [i](#) Standard Specification for Unfaced Preformed Rigid Cellular Polyurethane Thermal Insulation

Current Active Version: C591-2019 [i](#)

C592-1980 [i](#) Standard Specification for Mineral Fiber Blanket Insulation and Blanket-Type Pipe Insulation )Metal-Mesh Covered) (Industrial Type)

Current Active Version: C592-2016 [i](#)

C595-1979 [i](#) Standard Specification for Blended Hydraulic Cements

C595-2008 [i](#)

Current Active Version: C595/C595M-2019 [i](#)

C610-1985 [i](#) Standard Specification for Expanded Perlite Block and Pipe Thermal Insulation

Current Active Version: C610-2017 [i](#)

C612-1983e1 [i](#) Standard Specification for Mineral Fiber Block and Board Thermal Insulation

Current Active Version: C612-2014 [i](#)

C618-1978 [i](#) Standard Specification for Fly Ash And Raw Or Calcined Natural Pozzolan For Use As A Mineral Admixture In Portland Cement Concrete

Current Active Version: C648-2019 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 47 of 123](#)

C630-1978 [i](#) Standard Specification for Water-Resistant Gypsum Backing Board

Replaced By: C1396/C1396M [i](#)

C652-1977 [i](#) Standard Specification for Hollow Brick (Hollow Masonry Units Made From Clay Or Shale)

Current Active Version: C652-2019a [i](#)

C654-1980 [i](#) Standard Specification for Porous Concrete Pipe

Current Active Version: C654-2019 [i](#)

C655-1977 [i](#) Standard Specification for Reinforced Concrete D-Load Culvert,,Storm Drain, And Sewer Pipe

Current Active Version: C655-2019a [i](#)

C665-1988 [i](#) Standard Specification for Mineral-Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing

Current Active Version: C665-2017 [i](#)

C666-1977 [i](#) Standard Test Method for Resistance Of Concrete To Rapid Freezing And Thawing

Current Active Version: C666/C666M-2015 [i](#)

C669-1975(1989)e1 [i](#) Standard Specification for Glazing Compounds for Back Bedding and Face Glazing of Metal Sash

C700-1978a(1983) [i](#) Standard Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated

Current Active Version: C700-2018 [i](#)

C720-1989(1994)e1 [i](#) Specification for Spray-Applied Fibrous Thermal Insulation for Elevated Temperature (Withdrawn 1999)

Replaced By: No\_Replacement

C726-1981 [i](#) Standard Specification for Mineral Fiber And Mineral Fiber, Rigid Cellular Polyurethane Composite Roof Insulation Board

C726-1988 [i](#)

Current Active Version: C725-2017 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 48 of 123](#)

C728-1989a [i](#) Standard Specification for Perlite Thermal Insulation Board

Current Active Version: C728-2017a [i](#)

C739-1977 [i](#) Standard Specification for Cellulosic Fiber (Wood-Base) Loose-Fill Thermal Insulation

C739-1988 [i](#)

C739-2003 [i](#)

Current Active Version: C739-2017 [i](#)

C754-1979 [i](#) Standard Specification for Installation Of Steel Framing Members To Receive Screw-Attached Gypsum Wallboard, Backing Board, Or Water-Resistant Backing Board

Current Active Version: C754-2018 [i](#)

C755-1985(1990) [i](#) Standard Practice for Selection of Vapor Retarders for Thermal Insulation

Current Active Version: C755-2019a [i](#)

C764-1988 [i](#) Standard Specification for Mineral Fiber loose-Fill Thermal Insulation

Current Active Version: C764-2019 [i](#)

C803-1979 [i](#) Standard Test Method for Penetration Resistance Of Hardened Concrete

Current Active Version: C803/C803M-2018 [i](#)

C834-1976(1986) [i](#) Standard Specification for Latex Sealing Compounds

Current Active Version: C834-2017 [i](#)

C840-1979 [i](#) Standard Specification for Application And Finishing Of Gypsum Board

Current Active Version: C840-2019 [i](#)

C843-1976 [i](#) Standard Specification for Application Of Gypsum Veneer Plaster

Current Active Version: C843-2017 [i](#)

C844-1979 [i](#) Standard Specification for Application Of Gypsum Base To Receive Gypsum Veneer Plaster

Current Active Version: C844-2015 [i](#)

C846-1976(1982)e1 [i](#) Standard Practice for Application Of Structural Insulating Board (Fiberboard) Sheathing

Current Active Version: C846-2016 [i](#)

C847-1977 [i](#) Standard Specification for Metal Lath

Current Active Version: C847-2018 [i](#)

C892-1989 [i](#) Standard Specification for High-Temperature Fiber Blanket Thermal Insulation

Current Active Version: C892-2019 [i](#)

C902-1979 [i](#) Standard Specification for Pedestrian And Light Traffic Paving Brick

C902-1984 [i](#)

Current Active Version: C902-2015 [i](#)

C920-1987 [i](#) Standard Specification for Elastomeric Joint Sealants

C920-2002 [i](#)

Current Active Version: C920-2018 [i](#)

C971-1982(1992) [i](#) Standard Guide for Selection and Application of Insulation Systems for Heating, Ventilating, and Air Conditioning Duct Work

C976-1990(1996)e1 [i](#) Standard Test Method for Thermal Performance of Building Assemblies by Means of a Calibrated Hot Box (Withdrawn 2002)

Replaced By: C1363 [i](#)

C1045-2001 [i](#) Standard Practice for Calculating Thermal Transmission Properties Under Steady-State Conditions

Current Active Version: C1045-2019 [i](#)

C1114-2000 [i](#) Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Thin-Heater Apparatus

Current Active Version: C1114-2006(2019) [i](#)

C1149-2002 [i](#) Standard Specification for Self-Supported Spray Applied Cellulosic Thermal Insulation

Current Active Version: C1149-2017 [i](#)

C1166-2000 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 50 of 123](#) Standard Test Method for Flame Propagation of Dense and Cellular Elastomeric Gaskets and Accessories

Current Active Version: C1166-2006(2016) [i](#)

C1186-1991 [i](#) Standard Specification for Flat Non-Asbestos Fiber-Cement Sheets

Current Active Version: C1186-2008(2016) [i](#)

C1224-2003 [i](#) Standard Specification for Reflective Insulation for Building Applications

Current Active Version: C1224-2015 [i](#)

C1264-2011 [i](#) Standard Specification for Sampling, Inspection, Rejection, Certification, Packaging, Marking, Shipping, Handling, and Storage of Gypsum Panel Products

Current Active Version: C1264-2014a [i](#)

C1265-1994(2011) [i](#) Standard Test Method for Determining the Tensile Properties of an Insulating Glass Edge Seal for Structural Glazing Applications

Current Active Version: C1265-2017 [i](#)

C1315-1995 [i](#) Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete

Current Active Version: C1315-2019 [i](#)

C1363-1997 [i](#) Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus

Current Active Version: C1363-2019 [i](#)

C1371-2004 [i](#) Standard Test Method for Determination of Emittance of Materials Near Room Temperature Using Portable Emissometers

Current Active Version: C1371-2015 [i](#)

C1374-1997 [i](#) Standard Test Method for Determination of Installed Thickness of Pneumatically Applied Loose-Fill Building Insulation

C1374-2003 [i](#)

Current Active Version: C1374-2018 [i](#)

C1549-2009 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 51 of 123](#) Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer

Current Active Version: C1549-2016 [i](#)

D5-1965 [i](#) Standard Method Of Test For Penetration Of Bituminous Materials

D5-1973(1978) [i](#)

Current Active Version: D5/D5M-2019 [i](#)

D36-1976 [i](#) Standard Test Method for Softening Point Of Bitumen (Ring-And-Ball Apparatus)

Current Active Version: D36/D36M-2014e1 [i](#)

D56-1970 [i](#) Standard Method Of Test For Flash Point By Tag Closed Tester

D56-1987 [i](#)

D56-1993 [i](#)

D56-2005 [i](#)

Current Active Version: D56-2016a [i](#)

D86-1978 [i](#) Standard Method for Distillation Of Petroleum Products

D86-1982e2 [i](#)

D86-1990e2 [i](#)

D86-1993 [i](#)

D86-1995 [i](#)

D86-1996 [i](#)

D86-2001 [i](#)

D86-2007 [i](#)

D86-2007a [i](#)

D86-2012 [i](#)

Current Active Version: D86-2018 [i](#)

D88-1956(1968) [i](#) Standard Method Of Test For Saybolt Viscosity

D88-1981(1987)e1 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 52 of 123](#)

Current Active Version: D88/D88M-2007(2019)e1 [i](#)

D92-1985 [i](#) Standard Test Method for Flash and Fire Points by Cleveland Open Cup

D92-1997 [i](#)

Current Active Version: D92-2018 [i](#)

D93-1971 [i](#) Standard Method Of Test For Flash Point By Pensky-Martens Closed Tester

D93-1980e1 [i](#)

D93-1985 [i](#)

D93-1990e1 [i](#)

D93-1994 [i](#)

D93-1997 [i](#)

D93-2002 [i](#)

D93-2007 [i](#)

D93-2008 [i](#)

D93-2013 [i](#)

Current Active Version: D93-2018 [i](#)

D95-2005(2010) [i](#) Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation

Current Active Version: D95-2013(2018) [i](#)

D97-1987e1 [i](#) Standard Test Method for Pour Point of Petroleum Oils

Current Active Version: D97-2017b [i](#)

D120-1987e1 [i](#) Standard Specification for Rubber Insulating Gloves

Current Active Version: D120-2014a [i](#)

D127-1963(1977) [i](#) Standard Test Method for Drop Melting Point Of Petroleum Wax Including Petrolatum

Current Active Version: D127-2008(2015) [i](#)

D129-1964(1968) [Standard Method Of Test For Sulfur In Petroleum Products By The Bomb Method](#)

D129-1964(1978) [i](#)

D129-1995 [i](#)

D129-2000 [i](#)

Current Active Version: D129-2018 [i](#)

D150-1987 [i](#) Standard Test Methods for A-C Loss Characteristics and Permittivity (Dielectric Constant) of Solid Electrical Insulating Materials

Current Active Version: D150-2018 [i](#)

D156-1982 [i](#) Standard Test Method for Saybolt Color of Petroleum Products (Saybolt Chromometer Method)

Current Active Version: D156-2015 [i](#)

D173-1997b [i](#) Standard Specification for Bitumen-Saturated Cotton Fabrics Used in Roofing and Waterproofing

Current Active Version: D173/D173M-2003(2018) [i](#)

D178-1988 [i](#) Standard Specification for Rubber Insulating Matting

D178-1993(1998) [i](#)

Current Active Version: D178-2019 [i](#)

D224-1975 [i](#) Standard Specification for Smooth-Surfaced Asphalt Roll Roofing (Organic Felt)

Replaced By: D6380 [i](#)

D225-1965(1978) [i](#) Standard Specification for Asphalt Shingles (Organic Felt) Surfaced With Mineral Granules

D227-1981 [i](#) Standard Specification for Coal-Tar-Saturated Organic Felt Used In Roofing And Waterproofing

Current Active Version: D227/D227M-2003(2018) [i](#)

D240-1976 [i](#) Standard Test Method for Heat Of Combustion Of Liquid Hydrocarbon Fuels By Bomb Calorimeter

D240-1987(1991)e1 [i](#)



D240-1987e1 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 54 of 123](#)

D240-1992(1997)e2 [i](#)

D240-2000 [i](#)

D240-2009 [i](#)

Current Active Version: D240-2017 [i](#)

D250-1977e1 [i](#) Standard Specification for Asphalt-Saturated Asbestos Felt Used In Roofing And Waterproofing

D257-1999 [i](#) Standard Test Methods for DC Resistance or Conductance of Insulating Materials

Current Active Version: D257-2014 [i](#)

D270-1965(1980) [i](#) Methods of Sampling Petroleum and Petroleum Products (Withdrawn 1982)

Replaced By: D4057 and D4177

D287-1992(2000)e1 [i](#) Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)

Current Active Version: D287-2012b [i](#)

D297-1981 [i](#) Standard Methods for Rubber Products - Chemical Analysis

Current Active Version: D297-2015 [i](#)

D302-1958(1975) [i](#) Standard Specification for Ethyl Acetate (85 To 88 Percent Grade)

Replaced By: D4614 [i](#)

D312-1978 [i](#) Standard Specification for Asphalt Used In Roofing

Current Active Version: D312/D312M-2016a [i](#)

D323-1958(1968) [i](#) Standard Method Of Test For Vapor Pressure Of Petroleum Products (Reid Method)

D323-1982e2 [i](#)

D323-1990 [i](#)

D323-1994 [i](#)

Current Active Version: D323-2015a [i](#)

D362-1975 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 55 of 123](#) Standard Specification for Industrial Grade Toluene

D362-1984 [i](#)

D381-1980e1 [i](#) Standard Test Method for Existent Gum in Fuels by Jet Evaporation

Current Active Version: D381-2012(2017) [i](#)

D388-1977 [i](#) Standard Specification for Classification Of Coals By Rank

D388-1988 [i](#)

D388-1990 [i](#)

D388-1991 [i](#)

D388-1991a [i](#)

D388-1992 [i](#)

D388-1995 [i](#)

D388-1998 [i](#)

D388-1999 [i](#)

D388-1999(2004)e1 [i](#)

Current Active Version: D388-2019 [i](#)

D396-1978 [i](#) Standard Specification for Fuel Oils

D396-1989 [i](#)

D396-1990 [i](#)

D396-1992 [i](#)

D396-1996 [i](#)

D396-1998 [i](#)

D396-2002 [i](#)

D396-2010 [i](#)

Current Active Version: D396-2019 [i](#)

D412-1968 [i](#) Standard Method Of Tension Testing Of Vulcanized Rubber

D412-1998a [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 56 of 123](#)

Current Active Version: D412-2016 [i](#)

D413-1998 [i](#) Standard Test Methods for Rubber Property-Adhesion to Flexible Substrate

Current Active Version: D413-1998(2017) [i](#)

D418-1982 [i](#) Standard Methods of Testing Pile Yarn Floor Covering Construction

D418-1992 [i](#)

D439-1985a [i](#) Standard Specification for Automotive Gasoline

Replaced By: D4814 [i](#)

D445-1965 [i](#) Standard Method Of Test For Viscosity Of Transparent And Opaque Liquids (Kinematic And Dynamic Viscosities)

D445-1974 [i](#)

D445-1988 [i](#)

D445-1994e1 [i](#)

D445-2001 [i](#)

D445-2006 [i](#)

D445-2012 [i](#)

Current Active Version: D445-2019 [i](#)

D449-1973e1 [i](#) Standard Specification for Asphalt Used In Dampproofing And Waterproofing

Current Active Version: D449/D449M-2003(2014)e1 [i](#)

D450-1978 [i](#) Standard Specification for Coal-Tar Bitumen Used In Roofing, Dampproofing, And Waterproofing

Current Active Version: D450/D450M-2007(2018) [i](#)

D465-1982(1987)e1 [i](#) Standard Test Methods for Acid Number of Rosin

Current Active Version: D465-2015 [i](#)

D471-1996 [i](#) Standard Test Method for Rubber Property Effect of Liquids

D471-1998e1 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 57 of 123](#)

Current Active Version: D471-2016a [i](#)

D484-1971 [i](#) Standard Specification for Hydrocarbon Dry Cleaning Solvents

Replaced By: D235 [i](#)

D509-1970(1987) [i](#) Standard Test Methods of Sampling and Grading Rosin

Current Active Version: D509-2015 [i](#)

D511-2003 [i](#) Standard Test Methods for Calcium and Magnesium In Water

Current Active Version: D511-2014 [i](#)

D512-1989(1999) [i](#) Standard Test Methods for Chloride Ion In Water

Current Active Version: D512-2012 [i](#)

D516-1990(1995)e1 [i](#) Standard Test Method for Sulfate Ion in Water

D516-2002 [i](#)

Current Active Version: D516-2016 [i](#)

D523-1989(1999) [i](#) Standard Test Method for Specular Gloss

Current Active Version: D523-2014(2018) [i](#)

D524-1988 [i](#) Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products

Current Active Version: D524-2015 [i](#)

D566-1976 [i](#) Standard Test Method for Dropping Point Of Lubricating Grease

D566-1976(1982)e1 [i](#)

Current Active Version: D566-2017 [i](#)

D570-1995 [i](#) Standard Test Method for Water Absorption of Plastics

Current Active Version: D570-1998(2018) [i](#)

D579-1990 [i](#) Standard Specification for Greige Woven Glass Fabrics

Current Active Version: D579/D579M-2015 [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 58 of 123](#)

D610-1985(1989)e1 ⓘ Standard Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces

Current Active Version: D610-2008(2019) ⓘ

D611-1982(1998) ⓘ Standard Test Methods for Aniline Point and Mixed Aniline Point of Petroleum Products and Hydrocarbon Solvents

Current Active Version: D611-2012(2016) ⓘ

D613-1995 ⓘ Standard Test Method for Cetane Number of Diesel Fuel Oil

D613-2001 ⓘ

D613-2005 ⓘ

D613-2013 ⓘ

Current Active Version: D613-2018a ⓘ

D629-1988 ⓘ Standard Test Methods for Quantitative Analysis of Textiles

Current Active Version: D629-2015 ⓘ

D635-1997 ⓘ Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position

Current Active Version: D635-2018 ⓘ

D638-2003 ⓘ Standard Test Method for Tensile Properties of Plastics

Current Active Version: D638-2014 ⓘ

D660-1944(1970) ⓘ Standard Method Of Evaluating Degree Of Resistance To Checking Of Exterior Paints

Current Active Version: D660-1993(2011) ⓘ

D661-1944(1975) ⓘ Standard Method of Evaluating Degree Of Cracking Of Exterior Paints

Current Active Version: D661-1993(2011) ⓘ

D665-1998e1 ⓘ Standard Test Method for Rust-Preventing Characteristics of Inhibited Mineral Oil in the Presence of Water

Current Active Version: D665-2014e1 ⓘ

D714-1956(1981) [Case 1:13-cv-01215-TSG Document 198-40 Filed 10/07/19 Page 59 of 123](#) Standard Method of Evaluating Degree of Blistering of Paints

Current Active Version: D714-2002(2017) [i](#)

D721-1968(1982) [i](#) Standard Test Method for Oil Content of Petroleum Waxes

D721-1997 [i](#)

Current Active Version: D721-2017 [i](#)

D729-1995 [i](#) Standard Specification for Vinylidene Chloride Molding Compounds (Withdrawn 2000)

Replaced By: No\_Replacement

D750-1968 [i](#) Recommended Practice for Operating Light - And Weather-Exposure Apparatus (Carbon-Arc Type) For Artificial Weather Testing Of Rubber Compounds

Current Active Version: D750-2012(2017) [i](#)

D751-1995e1 [i](#) Standard Test Methods for Coated Fabrics

Current Active Version: D751-2019 [i](#)

D756-1978 [i](#) Standard Practice for Determination Of Weight And Shape Changes Of Plastics Under Accelerated Service Conditions

D772-1947(1975) [i](#) Standard Method of Evaluating Degree Of Flaking (Scaling) Of Exterior Paints

Current Active Version: D772-2018 [i](#)

D781-1968(1973) [i](#) Method of Test for Puncture and Stiffness of Paperboard, Corrugated and Solid Fiberboard (Withdrawn 1984)

Replaced By: No\_Replacement

D808-1987 [i](#) Standard Test Method for Chlorine in New and Used Petroleum Products (Bomb Method)

Current Active Version: D808-2016 [i](#)

D814-1995(2000) [i](#) Standard Test Method for Rubber Property- Vapor Transmission of Volatile Liquids

Current Active Version: D814-1995(2014) [i](#)

D822-1980 [i](#) Standard Practice for Operating Light - and Water-Exposure Apparatus (Carbon-Arc Type) For Testing Paint, Varnish, Lacquer, and Related Products

D822-1989 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 60 of 123](#)

Current Active Version: D822/D822M-2013(2018) [i](#)

D835-1985 [i](#) Standard Specification for Refined Benzene-485

D836-1984 [i](#) Specification for Industrial Grade Benzene (Withdrawn 1989)

Replaced By: No\_Replacement

D858-2002 [i](#) Standard Test Methods for Manganese in Water

Current Active Version: D858-2017 [i](#)

D882-1997 [i](#) Standard Test Method for Tensile Properties of Thin Plastic Sheeting

Current Active Version: D882-2018 [i](#)

D910-2007 [i](#) Standard Specification for Aviation Gasolines

Current Active Version: D910-2017a [i](#)

D923-1986 [i](#) Standard Methods of Sampling Electrical Insulating Liquids

D923-1989 [i](#)

Current Active Version: D923-2015 [i](#)

D938-1971(1981) [i](#) Standard Test Method for Congealing Point of Petroleum Waxes, Including Petrolatum

Current Active Version: D938-2012(2017) [i](#)

D968-1981(1986)e1 [i](#) Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive

Current Active Version: D968-2017 [i](#)

D971-1991 [i](#) Standard Test Method for Interfacial Tension of Oil Against Water by the Ring Method

Current Active Version: D971-2012 [i](#)

D975-1978 [i](#) Standard Specification for Diesel Fuel Oils

D975-1991 [i](#)

D975-1993 [i](#)

D975-1996a [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 61 of 123](#)

D975-1998be1 [i](#)

D975-2004 [i](#)

D975-2007 [i](#)

D975-2008a [i](#)

D975-2011b [i](#)

D975-2013a [i](#)

Current Active Version: D975-2019b [i](#)

D976-1980(1990)e1 [i](#) Standard Test Methods for Calculated Cetane Index of Distillate Fuels

D976-1991(2000)e1 [i](#)

D976-2006(2011) [i](#)

Current Active Version: D976-2006(2016) [i](#)

D994-1971(1982)e1 [i](#) Standard Specification for Performed Expansion Joint Filler for Concrete (Bituminous Type)

Current Active Version: D994/D994M-2011(2016) [i](#)

D1003-1992 [i](#) Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics

Current Active Version: D1003-2013 [i](#)

D1004-1994a [i](#) Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting

Current Active Version: D1004-2013 [i](#)

D1037-1978 [i](#) Standard Methods of Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials

Current Active Version: D1037-2012 [i](#)

D1048-1988ae1 [i](#) Standard Specification for Rubber Insulating Blankets

D1048-1993 [i](#)

Current Active Version: D1048-2014(2019) [i](#)



D1049-1988 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 62 of 123](#)  
Standard Specification for Rubber Insulating Covers

D1049-1993e1 [i](#)

Current Active Version: D1049-1998(2017) [i](#)

D1050-1990(1999) [i](#) Standard Specification for Rubber Insulating Line Hose

Current Active Version: D1050-2005(2017) [i](#)

D1051-1987 [i](#) Standard Specification for Rubber Insulating Sleeves

Current Active Version: D1051-2019 [i](#)

D1056-1968e1 [i](#) Standard Specification for Sponge and Expanded Cellular Rubber Products

Current Active Version: D1056-2014 [i](#)

D1067-1988 [i](#) Standard Test Methods for Acidity or Alkalinity of Water

Current Active Version: D1067-2016 [i](#)

D1068-2003 [i](#) Standard Test Methods for Iron in Water

Current Active Version: D1068-2015 [i](#)

D1072-1990(1999) [i](#) Standard Test Method for Total Sulfur in Fuel Gases

Current Active Version: D1072-2006(2017) [i](#)

D1078-2005 [i](#) Standard Test Method for Distillation Range of Volatile Organic Liquids

Current Active Version: D1078-2011(2019) [i](#)

D1081-1960(1968) [i](#) Standard Method of Test for Evaluating Pressure Sealing Properties Of Rubber And Rubber- Like Materials

D1121-1967 [i](#) Standard Method Of Test For Reserve Alkalinity Of Engine Antifreezes And Antirusts

Current Active Version: D1121-2011 [i](#)

D1123-1959(1968) [i](#) Standard Method Of Test For Water In Concentrated Engine Antifreezes By The Iodine Reagent Method

Current Active Version: D1123-1999(2015) [i](#)

D1126-1996 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 63 of 123](#)  
Standard Test Method for Hardness in Water

Current Active Version: D1126-2017 [i](#)

D1137-1953(1975) [i](#) Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer (Withdrawn 1981)

Replaced By: No\_Replacement

D1143-1981(1987)e1 [i](#) Standard Test Method for Piles Under Static Axial Compressive Load

Current Active Version: D1143/D1143M-2007(2013)e1 [i](#)

D1149-1978a [i](#) Standard Test Method for Rubber Deterioration - Surface Ozone Cracking In A Chamber ( Flat Specimen)

Current Active Version: D1149-2018 [i](#)

D1153-1983 [i](#) Standard Specification for Methly Isobutyl Ketone

D1153-1994(1997) [i](#)

Current Active Version: D1153-2012 [i](#)

D1193-1970 [i](#) Standard Specification For Reagent Water

D1193-1977e1 [i](#)

D1193-1991 [i](#)

Current Active Version: D1193-2006(2018) [i](#)

D1194-1972(1987)e1 [i](#) Standard Test Method for Bearing Capacity of Soil for Static Load and Spread Footings

D1200-1970 [i](#) Standard Method Of Test For Viscosity Of Paints, Varnishes, And Lacquers By Ford Viscosity Cup

Current Active Version: D1200-2010(2018) [i](#)

D1217-1993(1998) [i](#) Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer

Current Active Version: D1217-2015 [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 64 of 123](#)  
D1218-1982 Standard Test Method for Refractive Index and Refractive Dispersion of Hydrocarbon Liquids

Current Active Version: D1218-2012(2016) ⓘ

D1238-1985 ⓘ Standard Test Method for Flow Rates of Thermoplastics by Extrusion Plastometer

D1238-1990b ⓘ

Current Active Version: D1238-2013 ⓘ

D1240-1982 ⓘ Standard Test Method for Rosin Acids in Fatty Acids

Current Active Version: D1240-2014(2018) ⓘ

D1243-1979 ⓘ Standard Test Method for Dilute Solution Viscosity Of Vinyl Chloride Polymers

Current Active Version: D1243-2015 ⓘ

D1246-1995(1999) ⓘ Standard Test Method for Bromide Ion in Water

Current Active Version: D1246-2016 ⓘ

D1248-1984(1989)e1 ⓘ Standard Specification for Polyethylene Plastics Molding and Extrusion Materials

Current Active Version: D1248-2016 ⓘ

D1250-2007 ⓘ Standard Guide for Use of the Petroleum Measurement Tables

Current Active Version: D1250-2019 ⓘ

D1252-1995 ⓘ Standard Test Methods for Chemical Oxygen Demand (Dichromate Oxygen Demand) of Water

Current Active Version: D1252-2006(2012)e1 ⓘ

D1253-1986(1996) ⓘ Standard Test Method for Residual Chlorine in Water

D1253-2003 ⓘ

Current Active Version: D1253-2014 ⓘ

D1266-1987 ⓘ Standard Test Method for Sulfur in Petroleum Products (Lamp Method)

D1266-1991(1995) ⓘ

D1266-1998 ⓘ

Current Active Version: [D1266-2018](#) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 65 of 123](#)

D1267-2002(2007) [i](#) Standard Test Method for Gage Vapor Pressure of Liquefied Petroleum (LP) Gases (LP-Gas Method)

Current Active Version: [D1267-2018](#) [i](#)

D1293-1984(1990) [i](#) Standard Test Methods for pH of Water

D1293-1999 [i](#)

Current Active Version: [D1293-2018](#) [i](#)

D1298-1985(1990)e1 [i](#) Standard Practice for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method

D1298-1999 [i](#)

Current Active Version: [D1298-2012b\(2017\)](#) [i](#)

D1303-1955(1979)e1 [i](#) Standard Test Method for Total Chlorine In Vinyl Chloride Polymers And Copolymers

D1308-1979(1981)e1 [i](#) Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes

Current Active Version: [D1308-2002\(2013\)](#) [i](#)

D1310-1986(1997)e1 [i](#) Standard Test Method for Flash Point and Fire Point of Liquids by Tag Open-Cup Apparatus

Current Active Version: [D1310-2014](#) [i](#)

D1319-1989 [i](#) Standard Test Method for Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Absorption

D1319-1995a [i](#)

D1319-2002a [i](#)

D1319-2003 [i](#)


D1319-2013 [i](#)

Current Active Version: [D1319-2019](#) [i](#)


[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 66 of 123](#)  
D1331-1989(1995)  Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface-Active Agents


Current Active Version: D1331-2014 


D1335-1967  Standard Method Of Test For Tuft Bind Of Pile Floor Coverings

D1335-1967(1972) 


Current Active Version: D1335-2017e1 


D1353-1983e1  Standard Test Method for Nonvolatile Matter in Volatile Solvents for Use in Paint, Varnish, Lacquer, and Related Products

D1353-1996 


D1353-1996(2000)e1 


Current Active Version: D1353-2013 


D1386-1983(1993)e1  Standard Test Method for Acid Number (Empirical) of Synthetic and Natural Waxes


D1386-1998 


Current Active Version: D1386-2015 

D1387-1984  Standard Test Method for Saponification Number (Empirical) of Synthetic and Natural Waxes


D1387-1989(2002) 

Current Active Version: D1387-1989(2019) 

D1412-1993(1997)  Standard Test Method for Equilibrium Moisture of Coal at 96 to 97 Percent Relative Humidity and 30°C

Current Active Version: D1412/D1412M-2019 

D1415-1968  Standard Test Method for International Hardness Of Vulcanized Rubber

D1415-1988(1999) 

Current Active Version: D1415-2018 

D1418-1999  Standard Practice for Rubber and Rubber Latices-Nomenclature

Current Active Version: D1418-2017 

D1426-2003 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 67 of 123](#) Standard Test Methods for Ammonia-Nitrogen in Water

Current Active Version: D1426-2015 [i](#)

D1434-1982(1998) [i](#) Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting

D1434-1982(2009)e1 [i](#)

Current Active Version: D1434-1982(2015)e1 [i](#)

D1435-1994 [i](#) Standard Practice for Outdoor Weathering of Plastics

Current Active Version: D1435-2013 [i](#)

D1440-1977(1982) [i](#) Standard Test Method for Length and Length Distribution of Cotton Fibers (array Method)

Current Active Version: D1440-2007(2019) [i](#)

D1457-1983 [i](#) Standard Specification for PTFE Molding and Molding and Extrusion Materials

Replaced By: D4894,D4895

D1475-1960(1968) [i](#) Standard Method Of Test For Density Of Paint, Varnish, Lacquer, And Related Products

D1475-1985 [i](#)

D1475-1998 [i](#)

D1475-1998(2003) [i](#)

Current Active Version: D1475-2013 [i](#)


D1480-1993(1997) [i](#) Standard Test Method for Density and Relative Density (Specific Gravity) of Viscous Materials by Bingham Pycnometer

Current Active Version: D1480-2015 [i](#)

D1481-1991 [i](#) Standard Test Method for Density and Relative Density (Specific Gravity) of Viscous Materials by Lipkin Bicapillary Pycnometer


D1481-1993(1997) [i](#)


Current Active Version: D1481-2017 [i](#)


[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 68 of 123](#)  
D1492-1978(1984)e1  Standard Test Method for Bromine Index of Aromatic Hydrocarbons by  
Coulometric Titration

Current Active Version: D1492-2013 


D1500-1982  Standard Test Method for ASTM Color of Petroleum Products (ASTM Color Scale)

Current Active Version: D1500-2012(2017) 

D1505-1968(1979)  Standard Test Method for Density Of Plastics By The Density-Gradient Technique

D1505-1985(1990)e1 

Current Active Version: D1505-2018 


D1518-1985(1998)e1  Standard Test Method for Thermal Transmittance of Textile Materials


Current Active Version: D1518-2014 


D1525-1987  Standard Test Method for Vicat Softening Temperature of Plastics


Current Active Version: D1525-2017e1 

D1535-1968  Standard Method Of Specifying Color By The Munsell System


D1535-1989 


Current Active Version: D1535-2014(2018) 


D1545-1976(1989)e1  Standard Test Method for Viscosity of Transparent Liquids by Bubble Time  
Method

Current Active Version: D1545-2013(2017) 

D1552-1983  Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)

D1552-1990e1 

D1552-1995 

D1552-2001 

Current Active Version: D1552-2016e1 

D1564-1971e1  Standard Methods of Testing Slab Flexible Urethane Foam

Replaced By: D3574 

[Case 1:13-cv-01215-TSC Document 108-40 Filed 10/07/19 Page 69 of 123](#)  
D1565-1976 Standard Specification for Flexible Cellular Materials - Vinyl Chloride Polymers And Copolymers ( Open-Cell Foam)

D1593-1961(1969) Standard Specification For Nonrigid Vinyl Chloride Plastic Sheetting

Current Active Version: D1593-2013

D1601-1978 Standard Test Method for Dilute Solution Viscosity Of Ethylene Polymers

Current Active Version: D1601-2018

D1608-1960(1967) Standard Method Of Test For Oxides Of Nitrogen In Gaseous Combustion Products (Phenol-Disulfonic Acid Procedure)

Current Active Version: D1608-2016

D1613-1996(1999) Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products

Current Active Version: D1613-2017

D1621-1994 Standard Test Method for Compressive Properties of Rigid Cellular Plastics

Current Active Version: D1621-2016

D1622-1993 Standard Test Method for Apparent Density of Rigid Cellular Plastics

Current Active Version: D1622/D1622M-2014

D1640-1983(1989)e1 Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature

Current Active Version: D1640/D1640M-2014(2018)

D1646-1981 Standard Test Method for Rubber - Viscosity And Vulcanization Characteristics ( Mooney Viscometer)

D1646-1992

Current Active Version: D1646-2019

D1654-1992(2000) Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments

Current Active Version: D1654-2008(2016)e1



D1655-1985a [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 70 of 123](#) Standard Specification for Aviation Turbine Fuels

D1655-2007 [i](#)

Current Active Version: D1655-2019 [i](#)

D1667-1976(1990) [i](#) Standard Specification for Flexible Cellular Materials—Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam)

Current Active Version: D1667-2017 [i](#)

D1687-1992 [i](#) Standard Test Methods for Chromium in Water

D1687-2002 [i](#)

Current Active Version: D1687-2017 [i](#)

D1688-1990 [i](#) Standard Test Methods for Copper in Water

D1688-1995 [i](#)

D1688-2002 [i](#)

Current Active Version: D1688-2017 [i](#)

D1691-1990 [i](#) Standard Test Methods for Zinc in Water

Current Active Version: D1691-2017 [i](#)

D1692-1968 [i](#) Standard Method Of Test For Flammability Of Plastic Sheeting And Cellular Plastics

D1693-1994 [i](#) Standard Test Method for Environmental Stress-Cracking of Ethylene Plastics

D1693-2000 [i](#)

Current Active Version: D1693-2015 [i](#)

D1709-2001 [i](#) Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method

Current Active Version: D1709-2016ae1 [i](#)

D1747-1962(1978) [i](#) Standard Test Method for Refractive Index Of Viscous Materials

Current Active Version: D1747-2009(2019) [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 71 of 123](#)  
D1751-1999 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)

Current Active Version: D1751-2018 ⓘ

D1752-1967 ⓘ Standard Specifications For Preformed Expansion Joint Fillers For Concrete Paving And Structural Construction1 Nonextruding And Resilient Nonbituminous Types

Current Active Version: D1752-2018 ⓘ

D1776-1967e1 ⓘ Standard Method Of Conditioning Textiles And Textile Products For Testing

Current Active Version: D1776/D1776M-2016 ⓘ

D1796-1983(1990)e1 ⓘ Standard Test Method for Water and Sediment in Fuel Oils by the Centrifuge Method (Laboratory Procedure)

Current Active Version: D1796-2011(2016) ⓘ

D1824-1966(1972) ⓘ Standard Method Of Test For Apparent Viscosity Of Plastisols And Organosols At Low Shear Rates By Brookfield Viscometer

D1824-1966(1980)e1 ⓘ

Current Active Version: D1824-2016 ⓘ

D1826-1977 ⓘ Standard Test Method for Calorific Value Of Gases In Natural Gas Range By Continuous Recording Calorimeter

D1826-1994(1998) ⓘ

Current Active Version: D1826-1994(2017) ⓘ

D1835-1997 ⓘ Standard Specification for Liquefied Petroleum (LP) Gases

D1835-2003 ⓘ

Current Active Version: D1835-2018a ⓘ

D1836-1983 ⓘ Standard Specification for Commercial. Hexanes

Current Active Version: D1836-2007(2013) ⓘ

D1837-2002a(2007) ⓘ Standard Test Method for Volatility of Liquefied Petroleum (LP) Gases

D1838-1964(1968) [Standard Method Of Test For Copper Strip Corrosion By Liquefied Petroleum \(Lp\) Gases](#)

D1838-2007 [i](#)

Current Active Version: D1838-2016 [i](#)

D1861-1977 [i](#) Standard Specification for Homogeneous Bituminized Fiber Drain And Sewer Pipe

D1862-1977 [i](#) Standard Specification for Laminated-Wall Bituminized Fiber Drain And Sewer Pipe

D1863-1977 [i](#) Standard Specification for Mineral Aggregate Used On Built-Up Roofs

Current Active Version: D1863/D1863M-2005(2018) [i](#)

D1886-1994(1998) [i](#) Standard Test Methods for Nickel in Water

Current Active Version: D1886-2014 [i](#)

D1890-1996 [i](#) Standard Test Method for Beta Particle Radioactivity of Water

Current Active Version: D1890-2015(2017) [i](#)

D1922-2000a [i](#) Standard Test Method for Propagation Tear Resistance of Plastic Film and Thin Sheeting by Pendulum Method

Current Active Version: D1922-2015 [i](#)

D1943-1996 [i](#) Standard Test Method for Alpha Particle Radioactivity of Water

Current Active Version: D1943-2005(2012) [i](#)

D1945-1991 [i](#) Standard Test Method for Analysis of Natural Gas by Gas Chromatography

D1945-1996(2001) [i](#)

D1945-1996e1 [i](#)

D1945-2003 [i](#)

D1945-2003(2010) [i](#)

Current Active Version: D1945-2014 [i](#)

D1946-1977 [i](#) Standard Method for Analysis Of Reformed Gas By Gas Chromatography

D1946-1982 [i](#)

D1946-1990(1994)e1 [Case 1:18-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 73 of 123](#)

D1946-1990(2000) [i](#)

D1946-1990(2006) [i](#)

Current Active Version: D1946-1990(2015)e1 [i](#)

D1962-1985(1989)e1 [i](#) Standard Test Method for Saponification Value of Drying Oils, Fatty Acids, and Polymerized Fatty Acids

D1962-1985(1995) [i](#)

D2008-1985 [i](#) Ultraviolet Absorbance and Absorptivity of Petroleum Products

D2008-1991(1996)e1 [i](#)

Current Active Version: D2008-2012(2018) [i](#)

D2013-1972 [i](#) Standard Method Of Preparing Coal Samples For Analysis

D2013-1986(1994) [i](#)

D2013-2001 [i](#)

Current Active Version: D2013/D2013M-2018 [i](#)

D2015-1985 [i](#) Standard Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter

D2015-1996 [i](#)

D2016-1974(1983) [i](#) Methods of Test for Moisture Content of Wood (Withdrawn 1987)

Replaced By: No\_Replacement

D2036-1991 [i](#) Standard Test Methods for Cyanides in Water

D2036-1998 [i](#)

Current Active Version: D2036-2009(2015) [i](#)

D2099-2000 [i](#) Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester

Current Active Version: D2099-2014 [i](#)

D2103-1997 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 74 of 123](#)  
Standard Specification for Polyethylene Film and Sheeting

Current Active Version: D2103-2015 [i](#)

D2117-1982(1988)e1 [i](#) Standard Test Method for Melting Point of Semicrystalline Polymers by the Hot Stage Microscopy Method (Withdrawn 1994)

Replaced By: No\_Replacement

D2133-1966(1972) [i](#) Standard Specification For Acetal Resin Injection Molding And Extrusion Materials

D2156-1965(1970) [i](#) Standard Test Method for Smoke Density In The Flue Gases From Distillate Fuels

D2156-1980(1988)e1 [i](#)

Current Active Version: D2156-2009(2018) [i](#)

D2158-1989 [i](#) Standard Test Method for Residues in Liquefied Petroleum (LP) Gases

D2158-2005 [i](#)

Current Active Version: D2158-2016ae1 [i](#)

D2161-1966 [i](#) Standard Method Of Test For Conversion Of Kinematic Viscosity To Saybolt Universal Viscosity Or To Saybolt Furol Viscosity

D2161-1982 [i](#)

Current Active Version: D2161-2019 [i](#)

D2163-1991(1996) [i](#) Standard Test Method for Analysis of Liquefied Petroleum (LP) Gases and Propene Concentrates by Gas Chromatography (Withdrawn 2005)

D2163-2007 [i](#)

Current Active Version: D2163-2014(2019) [i](#)

D2178-1976 [i](#) Standard Specification for Asphalt-Impregnated Glass Mat Used In Roofing And Waterproofing

Current Active Version: D2178/D2178M-2015a [i](#)

D2197-1986(1991)e1 [i](#) Standard Test Method for Adhesion of Organic Coatings by Scrape Adhesion

Current Active Version: D2197-2016 [i](#)

D2216-1971 [i](#) Standard Method of Laboratory Determination Of Moisture Content Of Soil

D2216-1998 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 75 of 123](#)

Current Active Version: D2216-2019 [i](#)

D2234-1976 [i](#) Standard Methods for Collection Of A Gross Sample Of Coal

D2234-1989e1 [i](#)

D2234-1996 [i](#)

D2234-1997a [i](#)

D2234-1998 [i](#)

D2234-2000 [i](#)

Current Active Version: D2234/D2234M-2017 [i](#)

D2235-1988 [i](#) Standard Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings

Current Active Version: D2235-2004(2016) [i](#)

D2236-1970 [i](#) Standard Method Of Test For Dynamic Mechanical Properties Of Plastics By Means Of A Torsional Pendulum

D2236-1970(1976) [i](#)

Current Active Version: D4065-2012 [i](#)

D2247-1968(1973) [i](#) Standard Method for Testing Coated Metal Specimens At 100% Relative Humidity

D2247-1992 [i](#)

Current Active Version: D2247-2015 [i](#)

D2267-1968 [i](#) Standard Method Of Test For Aromatics In Light Naphthas And Aviation Gasolines By Gas Chromatography

D2267-1988 [i](#)

Current Active Version: -19 [i](#)

D2287-1981(1988)e1 [i](#) Standard Specification for Nonrigid Vinyl Chloride Polymer and Copolymer Molding and Extrusion Compounds

Current Active Version: D2287-2012 [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 76 of 128](#)  
D2311-1977(1981) ⓘ Standard Specification for Perforated, Homogeneous Bituminized Fiber Pipe for General Drainage

D2316-1975 ⓘ Standard Recommended Practice for Installing Bituminized Fiber Drain And Sewer Pipe

D2321-1974 ⓘ Recommended Practice for Underground Installation Of Flexible Thermoplastic Sewer Pipe

Current Active Version: D2321-2018 ⓘ

D2359-1985a ⓘ Standard Specification for Refined Benzene-535

D2359-1993 ⓘ

Current Active Version: D2359-2018a ⓘ

D2369-1981e1 ⓘ Standard Test Method for Volatile Content of Coatings

D2369-1987 ⓘ

D2369-1990 ⓘ

D2369-1992 ⓘ

D2369-1993 ⓘ

D2369-1995 ⓘ

Current Active Version: D2369-2010(2015)e1 ⓘ

D2372-1985(1999) ⓘ Standard Practice for Separation of Vehicle From Solvent-Reducible Paints

Current Active Version: D2372-1985(2015) ⓘ

D2382-1976 ⓘ Standard Test Method for Heat Of Combustion Of Hydrocarbon Fuels By Bomb Calorimeter (High-Precision Method)

D2382-1983 ⓘ

D2382-1988 ⓘ

Current Active Version: D4809-2018 ⓘ

D2417-1977(1981) ⓘ Standard Specification for Perforated, Laminated-Wall Bituminized Fiber Pipe for General Drainage

D2459-1972(1981)e1 ⓘ Standard Test Method for Gamma Spectrometry of Water

D2459-1972(1991)e1 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 77 of 123](#)

D2460-1997 [i](#) Standard Test Method for Alpha-Particle-Emitting Isotopes of Radium in Water

Current Active Version: D2460-2007(2013) [i](#)

D2487-1969(1975) [i](#) Standard Test Method for Classification Of Soils For Engineering Purposes

Current Active Version: D2487-2017 [i](#)

D2488-1969(1975) [i](#) Recommended Practice for Description Of Soils (Visual-Manual Procedure)

Current Active Version: D2488-2017e1 [i](#)

D2502-1992(1996) [i](#) Standard Test Method for Estimation of Molecular Weight (Relative Molecular Mass) of Petroleum Oils From Viscosity Measurements

Current Active Version: D2502-2014(2019) [i](#)

D2503-1982(1987)e1 [i](#) Standard Test Method for Molecular Weight (Relative Molecular Mass) of Hydrocarbons by Thermoelectric Measurement of Vapor Pressure

D2503-1992(1997) [i](#)

Current Active Version: D2503-1992(2016) [i](#)

D2504-1967 [i](#) Standard Method Of Test For Noncondensable Gases In C3 And Lighter Hydro-Carbon Products By Gas Chromatography

D2504-1967(1977) [i](#)

D2504-1988(1998) [i](#)

Current Active Version: D2504-1988(2015) [i](#)

D2513-1987 [i](#) Standard Specification for Thermoplastic Gas Pressure Piping Systems

D2513-1999 [i](#)

D2513-2009a [i](#)

D2513-2012ae1 [i](#)

Current Active Version: D2513-2019 [i](#)

D2515-1966 [i](#) Standard Specification For Kinematic Glass Viscometers



D2517-2000 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 78 of 123](#) Standard Specification for Reinforced Epoxy Resin Gas Pressure Pipe and Fittings

Current Active Version: D2517-2018 [i](#)

D2564-1991 [i](#) Standard Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems

D2564-1991a [i](#)

D2564-2012 [i](#)

Current Active Version: D2564-2012(2018) [i](#)

D2565-1970 [i](#) Standard Recommended Practice For Operating Xenon Arc-Type (Water-Cooled) Light - And Water-Exposure Apparatus For Exposure Of Plastics

D2565-1992 [i](#)

Current Active Version: D2565-2016 [i](#)

D2570-1991 [i](#) Standard Test Method for Simulated Service Corrosion Testing of Engine Coolants

Current Active Version: D2570-2016 [i](#)

D2584-1968 [i](#) Standard Method Of Test For Ignition Loss Of Cured Reinforced Resins

D2584-1968(1979)e1 [i](#)

D2584-1968(1985) [i](#)

D2584-1994 [i](#)

Current Active Version: D2584-2018 [i](#)

D2597-1994(1999) [i](#) Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography

D2598-2002(2007) [i](#) Standard Practice for Calculation of Certain Physical Properties of Liquefied Petroleum (LP) Gases from Compositional Analysis

Current Active Version: D2598-2016 [i](#)

D2622-1987e1 [i](#) Standard Test Method for Sulfur in Petroleum Products by X-Ray Spectrometry

D2622-1992e1 [i](#)

D2622-1994 [i](#)

D2622-1998 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 79 of 123](#)

D2622-2003 [i](#)

D2622-2007 [i](#)

D2622-2010 [i](#)

Current Active Version: D2622-2016 [i](#)

D2633-1982(1989) [i](#) Standard Methods of Testing Thermoplastic Insulations and Jackets for Wire and Cable

Current Active Version: D2633-2013a [i](#)

D2646-1979 [i](#) Standard Methods of Testing Backing Fabrics

D2646-1987 [i](#)

Current Active Version: D2646-2018 [i](#)

D2654-1967 [i](#) Tentative Methods of Test for Amount Of Moisture In Textile Materials

D2661-1978 [i](#) Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Drain, Waste, And Vent Pipe And Fittings

D2661-1991 [i](#)

Current Active Version: D2661-2014e1 [i](#)

D2665-1978 [i](#) Standard Specification for Poly(vinyl Chloride) (PVC) Plastic Drain, Waste, And Vent Pipe And Fittings

D2665-1991 [i](#)

D2665-1991a [i](#)

D2665-1991b [i](#)

Current Active Version: D2665-2014 [i](#)

D2697-1986(1998) [i](#) Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings

Current Active Version: D2697-2003(2014) [i](#)

D2699-1992 [i](#) Standard Test Method for Knock Characteristics of Motor Fuels by the Research Method

D2699-2013b [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 80 of 123](#)

Current Active Version: D2699-2019 [i](#)

D2700-1992 [i](#) Standard Test Method for Knock Characteristics of Motor and Aviation Fuels by the Motor Method

D2700-2013b [i](#)

Current Active Version: D2700-2019 [i](#)

D2709-1988 [i](#) Standard Test Method for Water and Sediment in Distillate Fuels by Centrifuge

Current Active Version: D2709-2016 [i](#)

D2713-1991(2001) [i](#) Standard Test Method for Dryness of Propane (Valve Freeze Method)

Current Active Version: D2713-2015e1 [i](#)

D2724-1987(1995) [i](#) Standard Test Methods for Bonded, Fused, and Laminated Apparel Fabrics

Current Active Version: D2724-2019 [i](#)

D2729-1978e1 [i](#) Standard Specification for Poly(Vinyl Chloride) (PVC) Sewer Pipe And Fittings

Current Active Version: D2729-2017 [i](#)

D2751-1977ae1 [i](#) Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe And Fittings

D2776-1979e1 [i](#) Standard Test Methods for Corrosivity of Water in the Absence of Heat Transfer (Electrical Methods)

Replaced By: G96 [i](#)

D2777-1998 [i](#) Standard Practice for Determination of Precision and Bias of Applicable Methods of Committee D-19 on Water

Current Active Version: D2777-2013 [i](#)

D2784-1989 [i](#) Standard Test Method for Sulfur in Liquefied Petroleum Gases (Oxy-Hydrogen Burner or Lamp)

D2784-2006 [i](#)

[Case 1:13-cv-01715-TSC Document 198-40 Filed 10/07/19 Page 81 of 123](#)  
D2794-1992 Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)

Current Active Version: D2794-1993(2019) ⓘ

D2842-1997 ⓘ Standard Test Method for Water Absorption of Rigid Cellular Plastics

Current Active Version: D2842-2019 ⓘ

D2846-1992 ⓘ Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Hot- and Cold-Water Distribution Systems

D2846-1992a ⓘ

Current Active Version: D2846/D2846M-2019a ⓘ

D2857-1970(1977) ⓘ Standard Test Method for Dilute Solution Viscosity Of Polymers

Current Active Version: D2857-2016 ⓘ

D2863-1995 ⓘ Standard Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-like Combustion of Plastics (Oxygen Index)

Current Active Version: D2863-2017a ⓘ

D2879-1983 ⓘ Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope

D2879-1986 ⓘ

D2879-1992e1 ⓘ

D2879-1996 ⓘ

D2879-1997 ⓘ

D2879-1997(2002)e1 ⓘ

Current Active Version: D2879-2018 ⓘ

D2880-1978 ⓘ Standard Specification for Gas Turbine Fuel Oils

D2880-1990 ⓘ

D2880-1990a ⓘ

D2880-1996 ⓘ

D2880-1996a [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 82 of 123](#)

D2880-2003 [i](#)

Current Active Version: D2880-2018a [i](#)

D2898-1977 [i](#) Standard Methods for Accelerated Weathering Of Fire-Retardant-Treated Wood For Fire Testing

Current Active Version: D2898-2010(2017) [i](#)

D2908-1974(1980)e1 [i](#) Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography

D2908-1991(2001) [i](#)

D2908-1991(2005) [i](#)

D2908-1991(2011) [i](#)

Current Active Version: D2908-1991(2017) [i](#)

D2949-1978 [i](#) Standard Specification for 3.25- In. Outside Diameter Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, And Vent Pipe And Fittings

Current Active Version: D2949-2018 [i](#)

D2972-1993 [i](#) Standard Test Methods for Arsenic in Water

D2972-2003 [i](#)

D2972-2015 [i](#)

Current Active Version: D2972-2015 [i](#)

D2986-1971 [i](#) Standard Method For Evaluation Of Air Assay Media By The Monodisperse Dop (Diocetyl Phthalate) Smoke Test

D2986-1971(1978)e1 [i](#)

D2986-1995 [i](#)

D2986-1995a [i](#)

D2986-1995a(1999) [i](#)

D3043-1987(1993)e1 [i](#) Standard Methods of Testing Structural Panels in Flexure

Current Active Version: D3043-2017 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 83 of 123](#)

D3086-1985(1990) ⓘ Standard Test Method for Organochlorine Pesticides in Water

Replaced By: D5812

D3120-1996 ⓘ Standard Test Method for Trace Quantities of Sulfur in Light Liquid Petroleum Hydrocarbons by Oxidative Microcoulometry

Current Active Version: D3120-2008(2019) ⓘ

D3172-1989(2002) ⓘ Standard Practice for Proximate Analysis of Coal and Coke

Current Active Version: D3172-2013 ⓘ

D3173-1973 ⓘ Standard Test Method for Moisture In The Analysis Sample Of Coal And Coke

D3173-1987(1996) ⓘ

D3173-2003 ⓘ

D3173-2003(2008) ⓘ

Current Active Version: D3173/D3173M-2017a ⓘ

D3174-2000 ⓘ Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal

Current Active Version: D3174-2012(2018) ⓘ

D3176-1974 ⓘ Standard Method for Ultimate Analysis Of Coal And Coke

D3176-1989(2002) ⓘ

Current Active Version: D3176-2015 ⓘ

D3177-1975 ⓘ Standard Test Methods for Total Sulfur In The Analysis Sample Of Coal And Coke

D3177-1989(1997) ⓘ

D3177-1989(2002) ⓘ

D3177-2002(2007) ⓘ

Current Active Version: D4239-2018e1 ⓘ

D3178-1984 ⓘ Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke

D3178-1989(1997) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 84 of 123](#)

D3178-1989(2002) [i](#)

Current Active Version: D5373-2016 [i](#)

D3223-1991 [i](#) Standard Test Method for Total Mercury in Water

D3223-2002 [i](#)

Current Active Version: D3223-2017 [i](#)

D3231-1989 [i](#) Standard Test Method for Phosphorus in Gasoline

D3231-2007 [i](#)

D3231-2013 [i](#)

Current Active Version: D3231-2018 [i](#)

D3236-1988(1999) [i](#) Standard Test Method for Apparent Viscosity of Hot Melt Adhesives and Coating Materials

Current Active Version: D3236-2015 [i](#)

D3237-2006 [i](#) Standard Test Method for Lead in Gasoline by Atomic Absorption Spectroscopy

D3237-2012 [i](#)

Current Active Version: D3237-2017 [i](#)

D3238-1995(2000)e1 [i](#) Standard Test Method for Calculation of Carbon Distribution and Structural Group Analysis of Petroleum Oils by the n-d-M Method

Current Active Version: D3238-2017a [i](#)

D3246-1981(1987)e1 [i](#) Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry

D3246-1992 [i](#)

D3246-1996 [i](#)

Current Active Version: D3246-2015 [i](#)

D3257-1993e1 [i](#) Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography

Current Active Version: D3257-2006(2012) [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 85 of 188](#)  
D3270-1980 Standard Method for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method)

D3270-1991(1995)e1 [i](#)

D3270-1991e1 [i](#)

Current Active Version: D3270-2013 [i](#)

D3273-1986(1991)e1 [i](#) Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber

Current Active Version: D3273-2016 [i](#)

D3278-1982e1 [i](#) Standard Test Methods for Flash Point of Liquids by Setflash Closed-Cup Apparatus

D3278-1996(2004)e1 [i](#)

D3278-1996e1 [i](#)

Current Active Version: D3278-1996(2011) [i](#)

D3286-1985e1 [i](#) Standard Test Method for Gross Caloric Value of Coal and Coke by the Isothermic Bomb Calorimeter

D3286-1996 [i](#)

Current Active Version: D5865/D5865M-2019 [i](#)

D3302-1991 [i](#) Standard Test Method for Total Moisture in Coal

Current Active Version: D3302/D3302M-2017 [i](#)

D3309-1992 [i](#) Standard Specification for Polybutylene (PB) Plastic Hot-and Cold-Water Distribution Systems

D3309-1992a [i](#)

D3311-1992 [i](#) Standard Specification for Drain, Waste, and Vent (DWV) Plastic Fittings Patterns

Current Active Version: D3311-2017 [i](#)

D3338-1992 [i](#) Standard Test Method for Estimation of Net Heat of Combustion of Aviation Fuels

Current Active Version: D3338/D3338M-2009(2014)e2 [i](#)

D3343-1990 [i](#) Standard Test Method for Estimation of Hydrogen Content of Aviation Fuels



Current Active Version: D3343-2016 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 86 of 123](#)

D3349-1986 ⓘ Standard Test Method for Absorption Coefficient of Carbon Black Pigmented Ethylene Plastic

Current Active Version: D3349-2017 ⓘ

D3370-1976 ⓘ Standard Practices for Sampling Water

D3370-1995a(1999)e1 ⓘ

D3370-2007 ⓘ

D3370-2008 ⓘ

D3370-2010 ⓘ

Current Active Version: D3370-2018 ⓘ

D3371-1995 ⓘ Standard Test Method for Nitriles in Aqueous Solution by Gas-Liquid Chromatography (Withdrawn 2002)

Replaced By: No\_Replacement

D3418-1982(1988)e1 ⓘ Standard Test Method for Transition Temperatures of Polymers By Thermal Analysis

Current Active Version: D3418-2015 ⓘ

D3454-1997 ⓘ Standard Test Method for Radium-226 in Water

Current Active Version: D3454-2018 ⓘ

D3462-1976 ⓘ Standard Specification for Asphalt Shingles Made From Glass Mat And Surfaced With Mineral Granules

Current Active Version: D3462/D3462M-2019 ⓘ

D3492-1997 ⓘ Standard Specification for Rubber Contraceptives (Male Condoms)

Current Active Version: D3492-2016 ⓘ

D3498-1993 ⓘ Standard Specification for Adhesives for Field-Gluing Plywood to Lumber Framing for Floor Systems

Current Active Version: D3498-2019a ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 87 of 123](#)  
D3536-1976e1 Standard Test Method for Molecular Weight Averages And Molecular Weight Distribution Of Polystyrene By Liquid Exclusion Chromatography (Gel Permeation Chromatography - Gpc)

Replaced By: D5296 ⓘ

D3557-1990 ⓘ Standard Test Methods for Cadmium in Water

D3557-2002 ⓘ

D3557-2002(2007)e1 ⓘ

Current Active Version: D3557-2017 ⓘ

D3558-1994(1998) ⓘ Standard Test Methods for Cobalt in Water

D3558-2003 ⓘ

Current Active Version: D3558-2015 ⓘ

D3559-2003 ⓘ Standard Test Methods for Lead in Water

D3559-2008 ⓘ

D3559-2015 ⓘ

Current Active Version: D3559-2015 ⓘ

D3574-1977e2 ⓘ Standard Methods of Testing Flexible Cellular Materials-Slab, Bonded, And Molded Urethane Foams

D3574-1995 ⓘ

Current Active Version: D3574-2017 ⓘ

D3588-1998 ⓘ Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

Current Active Version: D3588-1998(2017) ⓘ

D3590-2002 ⓘ Standard Test Methods for Total Kjeldahl Nitrogen in Water

D3590-2002(2006) ⓘ

Current Active Version: D3590-2017 ⓘ

D3606-1992 ⓘ Standard Test Method for Determination of Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography

D3606-2007 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 88 of 123](#)

Current Active Version: D3606-2017 [i](#)

D3645-2003 [i](#) Standard Test Methods for Beryllium in Water

Current Active Version: D3645-2015 [i](#)

D3649-1991 [i](#) Standard Test Method for High-Resolution Gamma-Ray Spectrometry of Water

D3649-1998a [i](#)

Current Active Version: D3649-2006(2014) [i](#)

D3656-1978 [i](#) Standard Specification for Insect Screening And Louver Cloth Woven From Vinyl-Coated-Glass Fiber Yarn

Current Active Version: D3656/D3656M-2013 [i](#)

D3675-1998 [i](#) Standard Test Method for Surface Flammability of Flexible Cellular Materials Using A Radiant Heat Energy Source

Current Active Version: D3675-2019 [i](#)

D3676-1978(1989)e1 [i](#) Standard Specification for Rubber Cellular Cushion Used for Carpet or Rug Underlay

D3676-1978e1 [i](#)

Current Active Version: D3676-2018 [i](#)

D3678-1988 [i](#) Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Interior-Profile Extrusions

Current Active Version: D3678-2014 [i](#)

D3695-1988 [i](#) Standard Test Method for volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography

D3695-1995 [i](#)

Current Active Version: D3695-1995(2013) [i](#)

D3697-1992(1996) [i](#) Standard Test Method for Antimony in Water

Current Active Version: D3697-2017 [i](#)

D3699-1978 [i](#) Standard Specification for Kerosine

D3699-2008 Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 89 of 123

Current Active Version: D3699-2018a ⓘ

D3792-1979e2 ⓘ Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatography

D3792-1991e1 ⓘ

Current Active Version: D3792-2016 ⓘ

D3826-1991e1 ⓘ Standard Practice for Determining Degradation End Point in Degradable Polyethylene and Polypropylene Using a Tensile Test

Current Active Version: D3826-2018 ⓘ

D3828-1997 ⓘ Standard Test Methods for Flash Point by Small Scale Closed Tester

Current Active Version: D3828-2016a ⓘ

D3835-1979(1983) ⓘ Standard Test Method for Rheological Properties of Thermoplastics with a Capillary Rheometer

Current Active Version: D3835-2016 ⓘ

D3859-2015 ⓘ Standard Test Methods for Selenium in Water

Current Active Version: D3859-2015 ⓘ

D3912-1980(1989) ⓘ Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants

Current Active Version: D3912-2010(2017) ⓘ

D3925-1981(1985) ⓘ Standard Practice for Sampling Liquid and Related Pigmented Coatings

Current Active Version: D3925-2002(2015) ⓘ

D3928-1989 ⓘ Standard Test Method for Evaluation of Gloss or Sheen Uniformity

Current Active Version: D3928-2000a(2018) ⓘ

D3936-1980 ⓘ Standard Test Method for Delamination Strength of Secondary Backing of Pile Floor coverings

Current Active Version: D3936-2017 ⓘ

D3953-1991 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 90 of 123](#)  
Standard Specification for Strapping, Flat Steel and Seals

D3953-1997 [i](#)

Current Active Version: D3953-2015 [i](#)

D3972-2002 [i](#) Standard Test Method for Isotopic Uranium in Water by Radiochemistry

Current Active Version: D3972-2009(2015) [i](#)

D3980-1987 [i](#) Standard Practice for Interlaboratory Testing of Paint and Related Materials

D4006-2011 [i](#) Standard Test Method for Water in Crude Oil by Distillation

Current Active Version: D4006-2016e1 [i](#)

D4017-1981(1987)e1 [i](#) Standard Test Method for Water in Paints and Paint Materials by Karl Fischer Method

D4017-1990 [i](#)

D4017-1996a [i](#)

Current Active Version: D4017-2002(2015) [i](#)

D4052-1996(2002)e1 [i](#) Standard Test Method for Density and Relative Density of Liquids by Digital Density Meter

D4052-2011 [i](#)

Current Active Version: D4052-2018a [i](#)

D4057-1981e2 [i](#) Standard Practice for Manual Sampling of Petroleum and Petroleum Products

D4057-1995(2000) [i](#)

D4057-2006(2011) [i](#)

Current Active Version: D4057-2019 [i](#)

D4066-1996 [i](#) Standard Classification System for Nylon Injection and Extrusion Materials (PA)

D4066-1996ae1 [i](#)

Current Active Version: D4066-2013 [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 91 of 123](#)  
D4082-1989 Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants

Current Active Version: D4082-2010(2017) [i](#)

D4084-1982(1988) [i](#) Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method)

D4084-1994(1999) [i](#)

Current Active Version: D4084-2007(2017) [i](#)

D4099-1989e1 [i](#) Standard Specification for Poly(Vinyl Chloride) (PVC) Prime Windows/Sliding Glass Doors

D4099-1995 [i](#)

D4101-1982(1988)e1 [i](#) Standard Specification for Propylene Plastic Injection and Extrusion Materials

Current Active Version: D4101-2017e1 [i](#)

D4107-1998(2002)e1 [i](#) Standard Test Method for Tritium in Drinking Water

Current Active Version: D4107-2008(2013) [i](#)

D4130-1982(1998) [i](#) Standard Test Method for Sulfate Ion in Brackish Water, Seawater, and Brines

Current Active Version: D4130-2015 [i](#)

D4177-1995 [i](#) Standard Practice for Automatic Sampling of Petroleum and Petroleum Products

D4177-1995(2000) [i](#)

D4177-1995(2010) [i](#)

Current Active Version: D4177-2016e1 [i](#)

D4190-1982(1988)e1 [i](#) Standard Test Method for Elements in Water by Direct-Current Argon Plasma atomic Emission Spectroscopy

D4190-1999 [i](#)

Current Active Version: D4190-2015 [i](#)

D4206-1996 [i](#) Standard Test Method for Sustained Burning of Liquid Mixtures Using the Small Scale Open-Cup Apparatus

Current Active Version: D4206-1996(2018) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 92 of 123](#)

D4208-2002(2007) [i](#) Standard Test Method for Total Chlorine in Coal by the Oxygen Bomb Combustion/Ion Selective Electrode Method

Current Active Version: D4208-2018 [i](#)

D4236-1994(2011) [i](#) Standard Practice for Labeling Art Materials for Chronic Health Hazards

Current Active Version: D4236-1994(2016)e1 [i](#)

D4239-1994 [i](#) Standard Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods

D4239-1997e1 [i](#)

D4239-2002 [i](#)

Current Active Version: D4239-2018e1 [i](#)

D4256-1989(1994)e1 [i](#) Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants (Withdrawn 1995)

Replaced By: No\_Replacement

D4268-1993 [i](#) Standard Test Methods for Testing Fiber Ropes (Withdrawn 2002)

Replaced By: No\_Replacement

D4294-1990(1998)e1 [i](#) Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy

D4294-1998 [i](#)

D4294-2002 [i](#)

D4294-2003 [i](#)

Current Active Version: D4294-2016e1 [i](#)

D4327-2003 [i](#) Standard Test Method for Anions in Water by Chemically Suppressed Ion Chromatography

Current Active Version: D4327-2017 [i](#)

D4329-1999 [i](#) Standard Practice for Fluorescent UV Exposure of Plastics

Current Active Version: D4329-2013 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 93 of 123](#)

D4359-1990(2000)e1 [i](#) Standard Test Method for Determining Whether a Material Is a Liquid or a Solid

D4359-1990(2006) [i](#)

Current Active Version: D4359-1990(2019) [i](#)

D4382-2002 [i](#) Standard Test Method for Barium in Water, Atomic Absorption Spectrophotometry, Graphite Furnace

Current Active Version: D4382-2018 [i](#)

D4420-1994(1999)e1 [i](#) Standard Test Method for Determination of Aromatics in Finished Gasoline by Gas Chromatography (Withdrawn 2004)

Replaced By: D5580 [i](#)

D4442-1984 [i](#) Standard Test Methods for Direct Moisture Content Measurement of Wood and Wood-Base Materials

D4442-1992(1997)e1 [i](#)

Current Active Version: D4442-2016 [i](#)

D4444-1992(1998)e1 [i](#) Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters

Current Active Version: D4444-2013(2018) [i](#)

D4457-1985(1996)e1 [i](#) Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph

Current Active Version: D4457-2002(2014) [i](#)

D4468-1985(2000) [i](#) Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry

Current Active Version: D4468-1985(2015) [i](#)

D4565-1990 [i](#) Standard Test Methods for Physical and Environmental Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable

D4565-1990a [i](#)

Current Active Version: D4565-2015 [i](#)



[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 94 of 123](#)  
D4566-1990 Standard Test Method for Electrical Performance Properties of Insulations and Jackets for Telecommunications Wire and Cable

Current Active Version: D4566-2014 [i](#)

D4568-1986 [i](#) Standard Test Methods for Evaluating Compatibility Between Cable Filling and Flooding Compounds and Polyolefin Cable Materials

Current Active Version: D4568-2013 [i](#)

D4596-1993 [i](#) Standard Practice for Collection of Channel Samples of Coal in a Mine

Current Active Version: D4596-2009(2015) [i](#)

D4606-2003 [i](#) Standard Test Method for Determination of Arsenic and Selenium in Coal by the Hydride Generation/Atomic Absorption Method

D4606-2003(2007) [i](#)

Current Active Version: D4606-2015 [i](#)

D4629-2002 [i](#) Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection

Current Active Version: D4629-2017 [i](#)

D4635-2001 [i](#) Standard Specification for Polyethylene Films Made from Low-Density Polyethylene for General Use and Packaging Applications

Current Active Version: D4635-2016 [i](#)

D4657-1992(1998) [i](#) Standard Test Method for Polynuclear Aromatic Hydrocarbons in Water (Withdrawn 2005)

Replaced By: No\_Replacement

D4734-1987 [i](#) Standard Specification for Refined Benzene-545


D4734-1996 [i](#)


D4734-1996a [i](#)


D4734-1996b [i](#)


Current Active Version: D4734-2018a [i](#)

[Case 1:19-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 95 of 123](#)  
D4763-1988(2001)  Standard Practice for Identification of Chemicals in Water by Fluorescence Spectroscopy


Current Active Version: D4763-2006(2012) 

D4785-1993  Standard Test Method for Low-Level Iodine-131 in Water


D4785-2000a 


Current Active Version: D4785-2008(2013)e1 


D4809-1995  Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method)


D4809-2000 

Current Active Version: D4809-2018 

D4814-1992a  Standard Specification for Automotive Spark-Ignition Engine Fuel

D4814-1993a 


D4814-1995a 


D4814-2007 


Current Active Version: D4814-2019 


D4872-1988  Standard Test Method for Dielectric Testing of Wire and Cable filling Compounds

Current Active Version: D4872-2014 


D4891-1989(1994)e1  Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion

D4891-1989(2006) 


Current Active Version: D4891-2013(2018) 

D4956-1990e1  Standard Specification for Retroreflective Sheeting for Traffic Control

Current Active Version: D4956-2019 

D4965-1996(2002)  Standard Terminology of Seams and Seam Finishes in Home Sewing

D4965-1996(2008) 

Current Active Version: D5646-2013(2018) 

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 96 of 123](#)

D4986-1998 ⓘ Standard Test Method for Horizontal Burning Characteristics of Cellular Polymeric Materials

Current Active Version: D4986-2018 ⓘ

D5066-1991(2001) ⓘ Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis

Current Active Version: D5066-1991(2017) ⓘ

D5087-2002 ⓘ Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)

Current Active Version: D5087-2002(2014) ⓘ

D5174-1997 ⓘ Standard Test Method for Trace Uranium in Water by Pulsed-Laser Phosphorimetry

D5174-2002 ⓘ

Current Active Version: D5174-2007(2013) ⓘ

D5186-1991 ⓘ Standard Test Method for Determination of Aromatic Content of Diesel Fuels by Supercritical Fluid Chromatography

D5186-1999 ⓘ

D5186-2003 ⓘ

D5186-2003(2009) ⓘ

Current Active Version: D5186-2019 ⓘ

D5191-2007 ⓘ Standard Test Method for Vapor Pressure of Petroleum Products (Mini Method)

D5191-2013 ⓘ

Current Active Version: D5191-2019 ⓘ

D5192-1991 ⓘ Standard Practice for Collection of Coal Samples from Core

D5192-2009 ⓘ

Current Active Version: D5192-2009(2015) ⓘ

D5198-1992(2003) ⓘ Standard Practice for Nitric Acid Digestion of Solid Waste

Current Active Version: [D5498-2017](#) [Case 1:13-cv-01215-TSG Document 198-40 Filed 10/07/19 Page 97 of 123](#)

D5208-1991 [i](#) Standard Practice for Fluorescent Ultraviolet (UV) Exposure of Photodegradable Plastics (Withdrawn 2000)

Replaced By: No\_Replacement [i](#)

D5257-1997 [i](#) Standard Test Method for Dissolved Hexavalent Chromium in Water by Ion Chromatography

Current Active Version: [D5257-2017](#) [i](#)

D5259-1992(2000) [i](#) Standard Test Method for Isolation and Enumeration of Enterococci from Water by the Membrane Filter Procedure

Current Active Version: [D5259-2019](#) [i](#)

D5261-1992(1996) [i](#) Standard Test Method for Measuring Mass per Unit Area of Geotextiles

Current Active Version: [D5261-2010\(2018\)](#) [i](#)

D5291-1992 [i](#) Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants

D5291-2002 [i](#)

Current Active Version: [D5291-2016](#) [i](#)

D5373-1993(1997) [i](#) Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Laboratory Samples of Coal and Coke

D5373-1993(2002) [i](#)

D5373-2002(2007) [i](#)

Current Active Version: [D5373-2016](#) [i](#)

D5392-1993(2000) [i](#) Standard Test Method for Isolation and Enumeration of *Escherichia Coli* in Water by the Two-Step Membrane Filter Procedure

Current Active Version: [D5392-2019](#) [i](#)

D5403-1993(2002) [i](#) Standard Test Methods for Volatile Content of Radiation Curable Materials

Current Active Version: [D5403-1993\(2013\)](#) [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 98 of 123](#)  
D5453-2000 Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence

D5453-2003 ⓘ

D5453-2006 ⓘ

Current Active Version: D5453-2019a ⓘ

D5489-1996c ⓘ Standard Guide for Care Symbols for Care Instructions on Textile Products

Current Active Version: D5489-2018 ⓘ

D5500-1994 ⓘ Standard Test Method for Vehicle Evaluation of Unleaded Automotive Spark-Ignition Engine Fuel for Intake Valve Deposit Formation

Current Active Version: D5500-2018 ⓘ

D5504-2001 ⓘ Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence

Current Active Version: D5504-2012 ⓘ

D5598-1994 ⓘ Standard Test Method for Evaluating Unleaded Automotive Spark-Ignition Engine Fuel for Electronic Port Fuel Injector Fouling

Current Active Version: D5598-2018 ⓘ

D5599-2000 ⓘ Standard Test Method for Determination of Oxygenates in Gasoline by Gas Chromatography and Oxygen Selective Flame Ionization Detection

Current Active Version: D5599-2018 ⓘ

D5673-1996 ⓘ Standard Test Method for Elements in Water by Inductively Coupled Plasma—Mass Spectrometry

D5673-2003 ⓘ

Current Active Version: D5673-2016 ⓘ

D5762-2002 ⓘ Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence

Current Active Version: D5762-2018a ⓘ

D5769-1998 ⓘ Standard Test Method for Determination of Benzene, Toluene, and Total Aromatics in Finished Gasolines by Gas Chromatography/Mass Spectrometry

Current Active Version: [D5769-2015](#) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 99 of 123](#)

D5797-2007 [i](#) Standard Specification for Fuel Methanol (M70-M85) for Automotive Spark-Ignition Engines

Current Active Version: [D5797-2018](#) [i](#)

D5798-2007 [i](#) Standard Specification for Fuel Ethanol (Ed75-Ed85) for Automotive Spark-Ignition Engines

Current Active Version: [D5798-2019b](#) [i](#)

D5812-1996(2002)e1 [i](#) Standard Test Method for Determination of Organochlorine Pesticides in Water by Capillary Column Gas Chromatography (Withdrawn 2011)

Replaced By: No\_Replacement

D5842-1995(2000) [i](#) Standard Practice for Sampling and Handling of Fuels for Volatility Measurement

Current Active Version: [D5842-2017](#) [i](#)

D5854-1996(2000) [i](#) Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products

Current Active Version: [D5854-2019a](#) [i](#)

D5864-2011 [i](#) Standard Test Method for Determining Aerobic Aquatic Biodegradation of Lubricants or Their Components

Current Active Version: [D5864-2018](#) [i](#)

D5865-1998a [i](#) Standard Test Method for Gross Calorific Value of Coal and Coke

D5865-2001 [i](#)

D5865-2004 [i](#)

Current Active Version: [D5865/D5865M-2019](#) [i](#)

D5965-2002 [i](#) Standard Test Methods for Specific Gravity of Coating Powders

Current Active Version: [D5965-2019](#) [i](#)

D6053-2000 [i](#) Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes

Current Active Version: D6093-2014(2018) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 100 of 123](#)

D6093-1997 [i](#) Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer

D6093-1997(2003) [i](#)

Current Active Version: D6093-1997(2016) [i](#)

D6216-1998 [i](#) Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications

Current Active Version: D6216-2012 [i](#)

D6228-1998 [i](#) Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection

Current Active Version: D6228-2019 [i](#)

D6266-2000a [i](#) Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released From Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement)

Current Active Version: D6266-2000a(2017) [i](#)

D6299-2002 [i](#) Standard Practice for Applying Statistical Quality Assurance Techniques to Evaluate Analytical Measurement System Performance

Current Active Version: D6299-2018 [i](#)

D6323-1998 [i](#) Standard Guide for Laboratory Subsampling of Media Related to Waste Management Activities

Current Active Version: D6323-2019 [i](#)

D6348-2003 [i](#) Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy

Current Active Version: D6348-2012e1 [i](#)

D6357-2004 [i](#) Test Methods for Determination of Trace Elements in Coal, Coke, & Combustion Residues from Coal Utilization Processes by Inductively Coupled Plasma Atomic Emission, Inductively Coupled Plasma Mass, & Graphite Furnace Atomic Absorption Spectrometry

D6357-2011 [i](#)

Current Active Version: D6357-2019 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 101 of 123](#)

D6366-1999 [i](#) Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection (Withdrawn 2006)

Replaced By: No\_Replacement

D6419-2000 [i](#) Standard Test Method for Volatile Content of Sheet-Fed and Coldset Web Offset Printing Inks

Current Active Version: D6419-2000(2017) [i](#)

D6420-1999 [i](#) Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry

D6420-1999(2004) [i](#)

Current Active Version: D6420-2018 [i](#)

D6428-1999 [i](#) Test Method for Total Sulfur in Liquid Aromatic Hydrocarbons and Their Derivatives by Oxidative Combustion and Electrochemical Detection (Withdrawn 2006)

Replaced By: No\_Replacement

D6503-1999 [i](#) Standard Test Method for Enterococci in Water Using Enterolert™

Current Active Version: D6503-2019 [i](#)

D6508-2015 [i](#) Standard Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte

Current Active Version: D6508-2015 [i](#)

D6522-2000 [i](#) Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers

D6522-2000(2005) [i](#)

Current Active Version: D6522-2011 [i](#)

D6615-2006 [i](#) Standard Specification for Jet B Wide-Cut Aviation Turbine Fuel

Current Active Version: D6615-2015a [i](#)



D6667-2001 [Case 1:13-cv-01215-TSG Document 198-40 Filed 10/07/19 Page 102 of 123](#) Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence

D6667-2004 [i](#)

Current Active Version: D6667-2014(2019) [i](#)

D6721-2001 [i](#) Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry

Current Active Version: D6721-2001(2015) [i](#)

D6735-2001 [i](#) Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method

D6751-2007 [i](#) Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels

D6751-2011b [i](#)

Current Active Version: D6751-2019 [i](#)

D6784-2002 [i](#) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)

D6784-2002(2008) [i](#)

Current Active Version: D6784-2016 [i](#)

D6866-2012 [i](#) Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis

Current Active Version: D6866-2018 [i](#)

D6883-2004 [i](#) Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles

Current Active Version: D6883-2017 [i](#)

D6888-2004 [i](#) Standard Test Method for Available Cyanide with Ligand Displacement and Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection

Current Active Version: D6888-2016 [i](#)

D6919-2003 [i](#) Standard Test Method for Determination of Dissolved Alkali and Alkaline Earth Cations and Ammonium in Water and Wastewater by Ion Chromatography

Current Active Version: D6919-2017 [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 103 of 123](#)

D6920-2007 ⓘ Standard Test Method for Total Sulfur in Naphthas, Distillates, Reformulated Gasolines, Diesels, Biodiesels, and Motor Fuels by Oxidative Combustion and Electrochemical Detection

D6985-2004 ⓘ Standard Specification for Middle Distillate Fuel Oil-Military Marine Applications

D7036-2004 ⓘ Standard Practice for Competence of Air Emission Testing Bodies

Current Active Version: D7036-2016 ⓘ

D7283-2017 ⓘ Standard Test Method for Alpha and Beta Activity in Water By Liquid Scintillation Counting

Current Active Version: D7283-2017 ⓘ

D7309-2007 ⓘ Standard Test Method for Determining Flammability Characteristics of Plastics and Other Solid Materials Using Microscale Combustion Calorimetry

Current Active Version: D7309-2019 ⓘ

D7430-2011ae1 ⓘ Standard Practice for Mechanical Sampling of Coal

Current Active Version: D7430-2018a ⓘ

D7467-2010 ⓘ Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20)

Current Active Version: D7467-2019 ⓘ

D7520-2013 ⓘ Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere

Current Active Version: D7520-2016 ⓘ

E1-1998e1 ⓘ Standard Specification for ASTM Thermometers

E1-2001 ⓘ

Current Active Version: E1-2014 ⓘ

E4-1979 ⓘ Standard Methods of Load Verification Of Testing Machines

E4-2003 ⓘ

Current Active Version: E4-2016 ⓘ

E8-1991 ⓘ Standard Test Method of Tension Testing of Metallic Materials

E8-1999 [i](#) [Case 1:13-cv-01215-TSC](#) [Document 198-40](#) [Filed 10/07/19](#) [Page 104 of 123](#)

Current Active Version: E8/E8M-2016a [i](#)

E11-1995 [i](#) Standard Specification for Wire Cloth and Sieves for Testing Purposes

Current Active Version: E11-2017 [i](#)

E23-1996 [i](#) Standard Test Method for Notched Bar Impact Testing of Metallic Materials

Current Active Version: E23-2018 [i](#)

E28-1967 [i](#) Standard Method Of Test For Softening Point By Ring-And-Ball Apparatus

E28-1967(1977) [i](#)

E28-1967(1982)e1 [i](#)

Current Active Version: E28-2018 [i](#)

E29-1967 [i](#) Recommended Practice For Indicating Which Places Of Figures Are To Be Considered Significant In Specified Limiting Values

E29-1967(1980)e1 [i](#)

E29-1990 [i](#)

E29-1993a(1999) [i](#)

E29-2002e1 [i](#)

Current Active Version: E29-2013(2019) [i](#)

E50-1990 [i](#) Standard Practices for Apparatus, Reagents, and Safety Precautions for Chemical Analysis of Metals

E50-1990(1995)e1 [i](#)

Current Active Version: E50-2017 [i](#)

E72-1977 [i](#) Standard Methods of Conducting Strength Tests Of Panels For Building Construction

E72-1980 [i](#)

Current Active Version: E72-2015 [i](#)

E77-1966 [i](#) Standard Method for Inspection, Test, And Standardization Of Liquid-in-Glass Thermometers

Current Active Version: E77-2014e1 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 105 of 123](#)

E84-1981a [i](#) Standard Test Method for Surface Burning Characteristics Of Building Materials

E84-1989a [i](#)

E84-1998e1 [i](#)

E84-2001 [i](#)

Current Active Version: E84-2019b [i](#)

E96-1990 [i](#) Standard Test Method for Water Vapor Transmission of Materials

E96-1995 [i](#)

Current Active Version: E96/E96M-2016 [i](#)

E100-1972(1978) [i](#) Standard Specification for Astm Hydrometers

Current Active Version: E100-2019 [i](#)

E108-1980a [i](#) Standard Methods of Fire Tests Of Roof Coverings

Current Active Version: E108-2017 [i](#)

E112-1988 [i](#) Standard Test Methods for Determining Grain Size

E112-1996e1 [i](#)

Current Active Version: E112-2013 [i](#)

E114-1995 [i](#) Standard Practice for Ultrasonic Pulse-Echo Straight-Beam Examination by the Contact Method

Current Active Version: E114-2015 [i](#)

E119-1988e1 [i](#) Standard Test Methods for Fire Tests of Building Construction and Materials

E119-1998 [i](#)

E119-2000a [i](#)

Current Active Version: E119-2018ce1 [i](#)

E131-1981a [i](#) Standard Definitions of Terms and Symbols Relating to Molecular Spectroscopy

Current Active Version: E131-2010(2015) [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 106 of 123](#)  
E145-1994(2001) ⓘ Standard Specification for Gravity-Convection And Forced-Ventilation Ovens

Current Active Version: E145-2019 ⓘ

E154-1968 ⓘ Standard Methods Of Testing Materials For Use As Vapor Barriers Under Concrete Slabs And As Ground Cover In Crawl Spaces

Current Active Version: E154/E154M-2008a(2019) ⓘ

E162-1987 ⓘ Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source

E162-1990e1 ⓘ

E162-1994 ⓘ

E162-1998 ⓘ

Current Active Version: E162-2016 ⓘ

E163-1980 ⓘ Standard Methods of Fire Tests Of Window Assemblies

Replaced By: E2010

E168-1967(1977) ⓘ Standard Recommended Practices for General Techniques Of Infrared Quantitative Analysis

E168-1988 ⓘ

E168-1992 ⓘ

Current Active Version: E168-2016 ⓘ

E169-1963(1977) ⓘ Standard Recommended Practices for General Techniques Of Ultraviolet Quantitative Analysis

E169-1963(1981)e1 ⓘ

E169-1987 ⓘ

E169-1993 ⓘ

Current Active Version: E169-2016 ⓘ

E180-1985 ⓘ Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals

E180-1993 ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 107 of 123](#)

E185-1973 ⓘ Standard Recommended Practice for Surveillance Tests For Nuclear Reactor Vessels

E185-1979 ⓘ

E185-1982e2 ⓘ

Current Active Version: E185-2016 ⓘ

E208-1995a ⓘ Standard Test Method for Conducting Drop-Weight Test to Determine Nil-Ductility Transition Temperature of Ferritic Steels

Current Active Version: E208-2017e1 ⓘ

E213-1998 ⓘ Standard Practice for Ultrasonic Examination of Metal Pipe and Tubing

Current Active Version: E213-2014e1 ⓘ

E220-1986(1996)e1 ⓘ Standard Test Method for Calibration of Thermocouples By Comparison Techniques

Current Active Version: E220-2013 ⓘ

E258-1967(1996)e1 ⓘ Standard Test Method for Total Nitrogen in Organic Materials by Modified Kjeldahl Method

Current Active Version: E258-2007(2015) ⓘ

E260-1973 ⓘ Standard Recommended Practice for General Gas Chromatography Procedures

E260-1985 ⓘ

E260-1991 ⓘ

E260-1996 ⓘ

Current Active Version: E260-1996(2019) ⓘ

E274-1965 ⓘ Tentative Method Of Test For Skid Resistance Of Pavements Using A Two-Wheel Trailer

E274-1979 ⓘ

Current Active Version: E274/E274M-2015 ⓘ

E283-1973 ⓘ Standard Test Method for Rate Of Air Leakage Through Exterior Windows, Curtain Walls, And Doors

E283-1991(1999) ⓘ

Current Active Version: E283/E283M-2019 [Case 1:13-cv-01215-TSG Document 198-40 Filed 10/07/19 Page 108 of 123](#)

E290-1997a [i](#) Standard Test Method for Bend Testing of Material for Ductility

Current Active Version: E290-2014 [i](#)

E298-1968 [i](#) Standard Methods For Assay Of Organic Peroxides

Current Active Version: E298-2017a [i](#)

E300-1986 [i](#) Standard Practice for Sampling Industrial Chemicals

Current Active Version: E300-2003(2017) [i](#)

E324-1979(1989)e1 [i](#) Standard Test Method for Relative Initial and Final Melting Points and the Melting Range of Organic Chemicals

Current Active Version: E324-2016 [i](#)

E330-1979 [i](#) Standard Test Method for Structural Performance Of Exterior Windows, Curtain Walls, And Doors By Uniform Static Air Pressure Difference

E330-1990 [i](#)

Current Active Version: E330/E330M-2014 [i](#)

E331-1970(1975) [i](#) Standard Test Method for Water Penetration Of Exterior Windows, Curtain Walls, And Doors By Uniform Static Air Pressure Difference

Current Active Version: E331-2000(2016) [i](#)

E380-1979 [i](#) Standard for Metric Practice

E380-1993 [i](#)

E408-1971(2002) [i](#) Standard Test Methods for Total Normal Emittance of Surfaces Using Inspection-Meter Techniques

Current Active Version: E408-2013 [i](#)

E413-1973 [i](#) Standard Classification for Determination of Sound Transmission Class

Current Active Version: E413-2016 [i](#)

E447-1974 [i](#) Standard Test Methods for Compressive Strength Of Masonry Prisms

Replaced By: C1388 [Case 1:18-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 109 of 123](#)

E492-1977 ⓘ Standard Method of Laboratory Measurement Of Impact Sound Transmission Through Floor-Ceiling Assemblies Using The Tapping Machine

Current Active Version: E492-2009(2016)e1 ⓘ

E501-1976 ⓘ Standard Specification for Standard Tire For Pavement Skid-Resistance Tests

Current Active Version: E501-2008(2015) ⓘ

E515-1995(2000) ⓘ Standard Test Method for Leaks Using Bubble Emission Techniques

Current Active Version: E515-2011(2018) ⓘ

E648-1978 ⓘ Standard Test Method for Critical Radiant Flux Of Floor-Covering Systems Using A Radiant Heat Energy Source

E648-1997e1 ⓘ

E648-2000 ⓘ

Current Active Version: E648-2019 ⓘ

E662-1997 ⓘ Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials

E662-2001 ⓘ

Current Active Version: E662-2019 ⓘ

E681-1985 ⓘ Standard Test Method for Concentration Limits of Flammability of Chemicals (Vapors and Gases)

E681-1998 ⓘ

Current Active Version: E681-2009(2015) ⓘ

E695-1979(1991) ⓘ Standard Method of Measuring Relative Resistance of Wall, Floor, and Roof Construction to Impact Loading

Current Active Version: E695-2003(2015)e1 ⓘ

E711-1987(2004) ⓘ Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter (Withdrawn 2004)

Replaced By: No\_Replacement



E773-1988 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 110 of 123](#) Standard Test Methods for Seal Durability of Sealed Insulating Glass Units

E773-1997 [i](#)

E774-1992 [i](#) Standard Specification for Sealed Insulating Glass Units

E774-1997 [i](#)

E775-1987(2004) [i](#) Standard Test Methods for Total Sulfur in the Analysis Sample of Refuse-Derived Fuel

Current Active Version: E775-2015 [i](#)

E776-1987(2004) [i](#) Standard Test Method for Forms of Chlorine in Refuse-Derived Fuel

E776-1987(2009) [i](#)

Current Active Version: E776-2016 [i](#)

E871-1982(1998) [i](#) Standard Method of Moisture Analysis of Particulate Wood Fuels

Current Active Version: E871-1982(2019) [i](#)

E885-1988(1996) [i](#) Standard Test Methods for Analyses of Metals in Refuse-Derived Fuel by Atomic Absorption Spectroscopy

E1084-1986(2009) [i](#) Standard Test Method for Solar Transmittance (Terrestrial) of Sheet Materials Using Sunlight

Current Active Version: E1084-1986(2015) [i](#)

E1136-1993(1998) [i](#) Standard Specification for A Radial Standard Reference Test Tire

E1136-1993(2003) [i](#)

Current Active Version: E1136-2017 [i](#)

E1333-1996 [i](#) Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber

Current Active Version: E1333-2014 [i](#)

E1337-1990(2002) [i](#) Standard Test Method for Determining Longitudinal Peak Braking Coefficient of Paved Surfaces Using a Standard Reference Test Tire

E1337-1990(2008) [i](#)

Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 111 of 123  
Current Active Version: E1337-1990(2018) ⓘ

E1354-1999 ⓘ Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter

Current Active Version: E1354-2017 ⓘ

E1367-1992 ⓘ Standard Guide for Conducting 10-day Static Sediment Toxicity Tests with Marine and Estuarine Amphipods

Current Active Version: E1367-2003(2014) ⓘ

E1537-1999 ⓘ Standard Test Method for Fire Testing of Real Scale Upholstered Furniture

Current Active Version: E1537-2016 ⓘ

E1590-2001 ⓘ Standard Test Method for Fire Testing of Mattresses

Current Active Version: E1590-2017 ⓘ

E1625-1994(2001) ⓘ Standard Test Method for Determining Biodegradability of Organic Chemicals in Semi-Continuous Activated Sludge (SCAS)

E1719-1997 ⓘ Standard Test Method for Vapor Pressure of Liquids by Ebulliometry

Current Active Version: E1719-2012(2018) ⓘ

E1918-2006 ⓘ Standard Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field

Current Active Version: E1918-2016 ⓘ

E2213-2003 ⓘ Standard Specification for Telecommunications and Information Exchange Between Roadside and Vehicle Systems — 5 GHz Band Dedicated Short Range Communications (DSRC) Medium Access Control (MAC) and Physical Layer (PHY) Specifications

Current Active Version: E2213-2003(2018) ⓘ

F34-1976(1980)e1 ⓘ Standard Test Method for Liquid Extraction of Flexible Barrier Materials


Current Active Version: F34-2013(2018) ⓘ


F146-1980 ⓘ Standard Test Methods for Fluid Resistance Of Gasket Materials

Current Active Version: F146-2012(2019)e1 ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 112 of 123](#)  
F337-1971(1979)  Recommended Practice for Dimensions and Tolerances for Bone Plates (Withdrawn 1982)


Replaced By: F786 


F377-1980  Standard Method for Calibration Of Braking Force For Testing Of Pneumatic Tires

Current Active Version: F377-2003(2015) 

F405-1977ae1  Standard Specification for Corrugated Polyethylene (PE) Tubing And Fittings


F406-2010a  Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards


F406-2013 

F406-2017 


Current Active Version: F406-2019 


F462-1979(1999)  Consumer Safety Specification for Slip-Resistant Bathing Facilities


F476-1984(1996)  Standard Test Methods for Security of Swinging Door Assemblies


F476-2014 


Current Active Version: F476-2014 


F478-1992(1999)  Standard Specification for In-Service Care of Insulating Line Hose and Covers


Current Active Version: F478-2014a(2019) 

F479-1993  Standard Specification for In-Service Care of Insulating Blankets

F479-1995 

Current Active Version: F479-2006(2017) 

F496-1993b  Standard Specification for In-Service Care of Insulating Gloves and Sleeves

F496-1997 

Current Active Version: F496-2014a 

F589-1985  Standard Consumer Safety Specification for Non-Powder Guns

Current Active Version: F589-2017 

F628-1979e1 [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 113 of 123](#) Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Drain, Waste, And Vent Pipe Having A Foam Core

F628-1991 [i](#)

Current Active Version: F628-2012e3 [i](#)

F631-1993 [i](#) Standard Guide for Collecting Skimmer Performance Data in Controlled Environments

Current Active Version: F631-2015 [i](#)

F682-1982a(1998) [i](#) Standard Specification for Wrought Carbon Steel Sleeve-Type Pipe Couplings

F682-1982a(2008) [i](#)

Current Active Version: F682-1982a(2018) [i](#)

F715-1995 [i](#) Standard Test Methods for Coated Fabrics Used for Oil Spill Control and Storage

Current Active Version: F715-2007(2018) [i](#)

F722-1982(1998) [i](#) Standard Specification for Welded Joints for Shipboard Piping Systems

F722-1982(2008) [i](#)

Current Active Version: F722-2018 [i](#)

F792-1988(1993)e1 [i](#) Standard Practice for Evaluating the Imaging Performance of Security X-Ray Systems

Current Active Version: F792-2017e1 [i](#)

F808-1983(1988)e1 [i](#) Standard Guide for Collecting Skimmer performance Data in Uncontrolled Environments

F833-2013b [i](#) Standard Consumer Safety Performance Specification for Carriages and Strollers

Current Active Version: F833-2019 [i](#)

F876-2010 [i](#) Standard Specification for Crosslinked Polyethylene (PEX) Tubing

Current Active Version: F876-2019a [i](#)

F877-2007 [i](#) Standard Specification for Crosslinked Polyethylene (PEX) Plastic Hot- and Cold-Water Distribution Systems

Current Active Version: F877-2018a [i](#)

F963-2007e1 ⓘ Standard Consumer Safety Specification for Toy Safety

F963-2017 ⓘ

Current Active Version: F963-2017 ⓘ

F977-2007 ⓘ Standard Consumer Safety Specification for Infant Walkers

F977-2012 ⓘ

Current Active Version: F977-2018 ⓘ

F1003-1986(1992) ⓘ Standard Specification for Searchlights on Motor Lifeboats

Replaced By: No\_Replacement ⓘ

F1006-1986(1992) ⓘ Standard Specification for Entrainment Separators for Use in Marine Piping Applications

F1006-1986(2008) ⓘ

Current Active Version: F1006-1986(2018) ⓘ

F1007-1986(1996)e1 ⓘ Standard Specification for Pipe-Line Expansion Joints of the Packed Slip Type for Marine Application

F1007-1986(2007) ⓘ

Current Active Version: F1007-2018 ⓘ

F1014-1992 ⓘ Specification for Flashlights on Vessels

F1014-2002(2007) ⓘ

Current Active Version: F1014-2002(2012)e1 ⓘ

F1020-1986(1996)e1 ⓘ Standard Specification for Line-Blind Valves for Marine Applications

F1020-1986(2011) ⓘ

Current Active Version: F1020-1986(2018) ⓘ

F1055-1998 ⓘ Standard Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene Pipe and Tubing

F1055-1998(2006) ⓘ

Current Active Version: F1055-2016a [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 115 of 123](#)

F1120-1987(1998) ⓘ Standard Specification for Circular Metallic Bellows Type Expansion Joints for Piping Applications

F1120-1987(2010) ⓘ

Current Active Version: F1120-1987(2015) ⓘ

F1121-1987(1998) ⓘ Standard Specification for International Shore Connections for Marine Fire Applications

F1121-1987(2010) ⓘ

Current Active Version: F1121-1987(2015) ⓘ

F1122-1987(1992) ⓘ Standard Specification for Quick Disconnect Couplings

F1122-1987(1998) ⓘ

Current Active Version: F1122-2004(2015)e1 ⓘ

F1123-1987(1998) ⓘ Standard Specification for Non-Metallic Expansion Joints

F1123-1987(2010) ⓘ

Current Active Version: F1123-1987(2015) ⓘ

F1139-1988(1998) ⓘ Standard Specification for Steam Traps and Drains

F1139-1988(2010) ⓘ

Current Active Version: F1139-1988(2015) ⓘ

F1155-1998 ⓘ Standard Practice for Selection and Application of Piping System Materials

Current Active Version: F1155-2010(2015) ⓘ

F1169-2010 ⓘ Standard Consumer Safety Specification for Full-Size Baby Cribs

F1169-2011 ⓘ

Current Active Version: F1169-2019 ⓘ

F1172-1988(1998) ⓘ Standard Specification for Fuel Oil Meters of the Volumetric Positive Displacement Type

F1172-1988(2015) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 116 of 123](#)

Current Active Version: F1172-1988(2015)e1 [i](#)

F1173-1995 [i](#) Standard Specification for Thermosetting Resin Fiberglass Pipe Systems to Be Used for Marine Applications

Current Active Version: F1173-2001(2018) [i](#)

F1193-2006 [i](#) Practice for Quality, Manufacture, and Construction of Amusement Rides and Devices

Current Active Version: F1193-2018a [i](#)

F1196-1994(2000) [i](#) Standard Specification for Sliding Watertight Door Assemblies

Current Active Version: F1196-2019 [i](#)

F1197-1989(2000) [i](#) Standard Specification for Sliding Watertight Door Control Systems

Current Active Version: F1197-2019 [i](#)

F1199-1988(1998) [i](#) Standard Specification for Cast (All Temperatures and Pressures) and Welded Pipe Line Strainers (150 psig and 150°F Maximum)

F1199-1988(2010) [i](#)

Current Active Version: F1199-1988(2015) [i](#)

F1200-1988(1998) [i](#) Standard Specification for Fabricated (Welded) Pipe Line Strainers (Above 150 psig and 150°F)

F1200-1988(2010) [i](#)

Current Active Version: F1200-1988(2016) [i](#)

F1201-1988(2010) [i](#) Standard Specification for Fluid Conditioner Fittings in Piping Applications Above 0°F

Current Active Version: F1201-1988(2016) [i](#)

F1235-2018 [i](#) Standard Consumer Safety Specification for Portable Hook-On Chairs

Current Active Version: F1235-2018 [i](#)

F1271-1990(1995)e1 [i](#) Standard Specification for Spill Valves for Use in Marine Tank Liquid Overpressure Protections Applications

F1271-1990(2012) [Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 117 of 123](#)

Current Active Version: F1271-1990(2018) [i](#)

F1273-1991(1997)e1 [i](#) Standard Specification for Tank Vent Flame Arresters

F1273-1991(2007) [i](#)

Current Active Version: F1273-1991(2013) [i](#)

F1292-1999 [i](#) Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment

F1292-2004 [i](#)

Current Active Version: F1292-2018 [i](#)

F1321-1992 [i](#) Standard Guide for Conducting a Stability Test (Lightweight Survey and Inclining Experiment) to Determine the Light Ship Displacement and Centers of Gravity of a Vessel

F1321-1992(2004) [i](#)

Current Active Version: F1321-2014 [i](#)

F1323-1998 [i](#) Standard Specification for Shipboard Incinerators

Current Active Version: F1323-2014 [i](#)

F1387-1993(1998) [i](#) Standard Specification for Performance of Mechanically Attached Fittings

Current Active Version: F1387-1999(2012) [i](#)

F1443-1993 [i](#) Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear

F1446-1993 [i](#) Standard Test Methods for Equipment and Procedures Used in Evaluating the Performance Characteristics of Protective Headgear

F1446-1994 [i](#)

Current Active Version: F1446-2015b [i](#)

F1447-1993 [i](#) Standard Specification for Protective Headgear Used in Bicycling

F1447-1994 [i](#)

Current Active Version: F1447-2018 [i](#)



[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 118 of 123](#)

F1471-1993 ⓘ Standard Test Method for Air Cleaning Performance of a High-Efficiency Particulate Air-Filter System

F1471-1993(2001) ⓘ

F1476-1995a ⓘ Standard Specification for Performance of Gasketed Mechanical Couplings for Use in Piping Applications

Current Active Version: F1476-2007(2013) ⓘ

F1487-2001 ⓘ Standard Consumer Safety Performance Specification for Playground Equipment for Public Use

Current Active Version: F1487-2017 ⓘ

F1546/F1546M-1996 ⓘ Standard Specification for Fire Hose Nozzles

F1546/F1546M-1996(2012) ⓘ

F1546-1996(2012)e1 ⓘ

Current Active Version: F1546-1996(2018) ⓘ

F1548-1994 ⓘ Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications

Current Active Version: F1548-2001(2018) ⓘ

F1626-1995(2000) ⓘ Standard Practice for Preparing Shipboard Fire Control Plans

F1805-2000 ⓘ Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces

Current Active Version: F1805-2018 ⓘ

F1821-2009 ⓘ Standard Consumer Safety Specification for Toddler Beds

F1821-2013 ⓘ

F1821-2016 ⓘ

Current Active Version: F1821-2019e1 ⓘ

F1924-2012 ⓘ Standard Specification for Plastic Mechanical Fittings for Use on Outside Diameter Controlled Polyethylene Gas Distribution Pipe and Tubing

Current Active Version: [F1924-2019](#) [Case 1:13-cv-01315-TSC Document 198-40 Filed 10/07/19 Page 119 of 123](#)

F1948-2012 [i](#) Standard Specification for Metallic Mechanical Fittings for Use on Outside Diameter Controlled Thermoplastic Gas Distribution Pipe and Tubing

Current Active Version: F1948-2015 [i](#)

F1950-1999 [i](#) Standard Specification for Physical Information to be Transferred With Used Amusement Rides and Devices (Withdrawn 2008)

Replaced By: No\_Replacement

F1951-1999 [i](#) Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment

Current Active Version: F1951-2014 [i](#)

F1967-2011a [i](#) Standard Consumer Safety Specification for Infant Bath Seats

Current Active Version: F1967-2019 [i](#)

F1973-2013 [i](#) Standard Specification for Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide 11 (PA11) and Polyamide 12 (PA12) Fuel Gas Distribution Systems

Current Active Version: F1973-2013(2018) [i](#)

F2085-2012 [i](#) Standard Consumer Safety Specification for Portable Bed Rails

Current Active Version: F2085-2012(2019) [i](#)

F2088-2013 [i](#) Standard Consumer Safety Specification for Infant Swings

Current Active Version: F2088-2015 [i](#)

F2145-2013 [i](#) Standard Specification for Polyamide 11 (PA 11) and Polyamide 12 (PA12) Mechanical Fittings for Use on Outside Diameter Controlled Polyamide 11 and Polyamide 12 Pipe and Tubing

Current Active Version: F2145-2013(2018) [i](#)

F2194-2013 [i](#) Standard Consumer Safety Specification for Bassinets and Cradles

Current Active Version: F2194-2016e1 [i](#)

F2236-2014 [i](#) Standard Consumer Safety Specification for Soft Infant and Toddler Carriers

Current Active Version: F2236-2016a [i](#)

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 120 of 123](#)  
F2412-2005 ⓘ Standard Test Methods for Foot Protection

Current Active Version: F2412-2018a ⓘ

F2413-2005 ⓘ Standard Specification for Performance Requirements for Foot Protection

Current Active Version: F2413-2018 ⓘ

F2517-2017 ⓘ Standard Specification for Determination of Child Resistance of Portable Fuel Containers for Consumer Use

Current Active Version: F2517-2017 ⓘ

F2600-2009 ⓘ Standard Specification for Electrofusion Type Polyamide-11 Fittings for Outside Diameter Controlled Polyamide-11 Pipe and Tubing

Current Active Version: F2600-2009(2018) ⓘ

F2613-2017a ⓘ Standard Consumer Safety Specification for Children's Chairs and Stools

Current Active Version: F2613-2017a ⓘ

F2620-2012 ⓘ Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings

Current Active Version: F2620-2019 ⓘ

F2670-2018 ⓘ Standard Consumer Safety Specification for Infant Bath Tubs

Current Active Version: F2670-2018 ⓘ

F2767-2012 ⓘ Standard Specification for Electrofusion Type Polyamide-12 Fittings for Outside Diameter Controlled Polyamide-12 Pipe and Tubing for Gas Distribution

Current Active Version: F2767-2018 ⓘ

F2785-2012 ⓘ Standard Specification for Polyamide 12 Gas Pressure Pipe, Tubing, and Fittings

Current Active Version: F2785-2018a ⓘ

F2817-2010 ⓘ Standard Specification for Poly (Vinyl Chloride) (PVC) Gas Pressure Pipe and Fittings For Maintenance or Repair

Current Active Version: F2817-2013(2019) ⓘ

[Case 1:13-cv-01215-TSC Document 198-40 Filed 10/07/19 Page 121 of 123](#)  
F2853-2010 Standard Test Method for Determination of Lead in Paint Layers and Similar Coatings or in Substrates and Homogenous Materials by Energy Dispersive X-Ray Fluorescence Spectrometry Using Multiple Monochromatic Excitation Beams

Current Active Version: F2853-2010(2015) ⓘ

F2876-2010 ⓘ Standard Practice for Thermal Rating and Installation of Internal Combustion Engine Packages for use in Hazardous Locations in Marine Applications

Current Active Version: F2876-2010(2015) ⓘ

F2906-2013 ⓘ Standard Consumer Safety Specification for Bedside Sleepers

Current Active Version: F2906-2013 ⓘ

F2907-2015 ⓘ Standard Consumer Safety Specification for Sling Carriers

Current Active Version: F2907-2015 ⓘ

F2945-2012a ⓘ Standard Specification for Polyamide 11 Gas Pressure Pipe, Tubing, and Fittings

Current Active Version: F2945-2018 ⓘ

F3264-2017 ⓘ Standard Specification for Normal Category Aeroplanes Certification

F3264-2018 ⓘ

F3264-2018b ⓘ

Current Active Version: F3264-2018b ⓘ

G1-1972 ⓘ Recommended Practice for Preparing, Cleaning, And Evaluating Corrosion Test Specimens

Current Active Version: G1-2003(2017)e1 ⓘ

G16-1971(1984) ⓘ Standard Practice for Applying Statistics to Analysis of Corrosion Data

Current Active Version: G16-2013(2019) ⓘ

G21-1990 ⓘ Standard Practice for Determining Resistance of Synthetic Polymetric Materials to Fungi

Current Active Version: G21-2015 ⓘ

G23-1969 ⓘ Standard Recommended Practice For Operating Light - And Water-Exposure Apparatus (Carbon-Arc Type) For Exposure Of Nonmetallic Materials

G23-1969(1975) ⓘ

G23-1981 [Case 1:13-cv-01215-TSC](#) [Document 198-40](#) [Filed 10/07/19](#) [Page 122 of 123](#)

G23-1990 [i](#)

G23-1993 [i](#)

Current Active Version: G152-2013 [i](#)

G26-1970 [i](#) Recommended Practice for Operating Light - And Water-Exposure Apparatus (Xenon-Arc Type) For Exposure Of Nonmetallic Materials

Replaced By: G155 [i](#)

G46-1976(1986)e1 [i](#) Standard Practice for Examination and Evaluation of Pitting Corrosion

Current Active Version: G46-1994(2018) [i](#)

G151-1997 [i](#) Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources

Current Active Version: G151-2019 [i](#)

G154-2000 [i](#) Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials

Current Active Version: G154-2016 [i](#)

All

*Search topic, title, author, A53*

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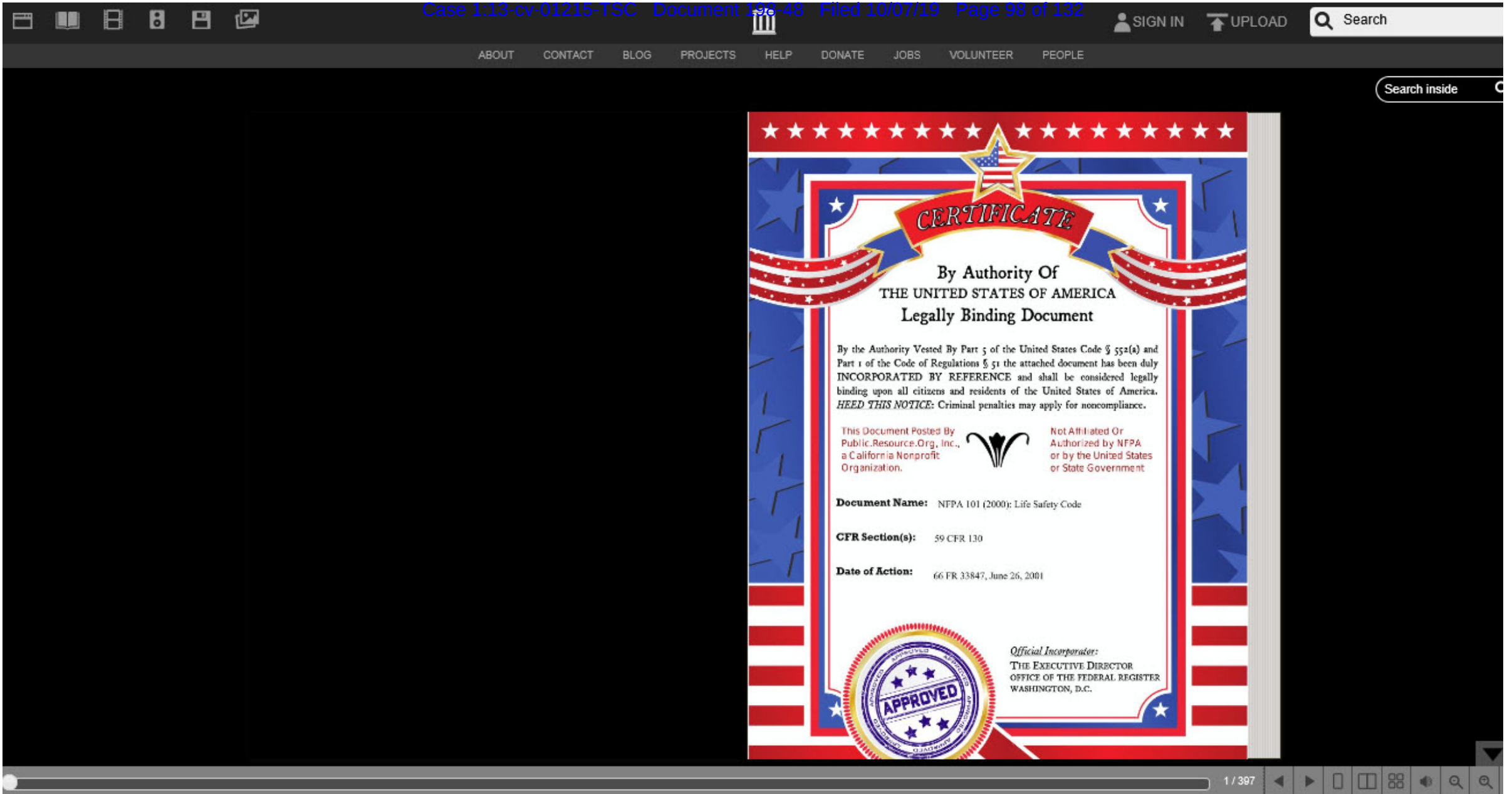
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Case 1:13-cv-01215-TSC Document 198-48 Filed 10/07/19 Page 97 of 132

# **EXHIBIT 167**



 **NFPA 101: Life Safety Code**  
by [National Fire Protection Association](#)



Publication date [2000](#)  
 Usage [CC0 1.0 Universal](#)   
 Topics [federalregister.gov](#), [public.resource.org](#)  
 Collection [publicsafetycode](#); [USGovernmentDocuments](#); [additional\\_collections](#)  
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*You are urged to check with the standards organizations or governmental authorities for further information and access to definitive versions of these important laws.*

**BY ORDER OF THE EXECUTIVE DIRECTOR**  
**Office of the Federal Register**  
**Washington, D.C.**

*By Authority of the Code of Federal Regulations: 59 CFR 130*

**Name of Legally Binding Document:** NFPA 101: Life Safety Code  
**Name of Standards Organization:** National Fire Protection Association

**LEGALLY BINDING DOCUMENT**

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Identifier [gov.law.nfpa.101.2000](#)  
 Identifier-ark [ark:/13960/t9n310d4w](#)  
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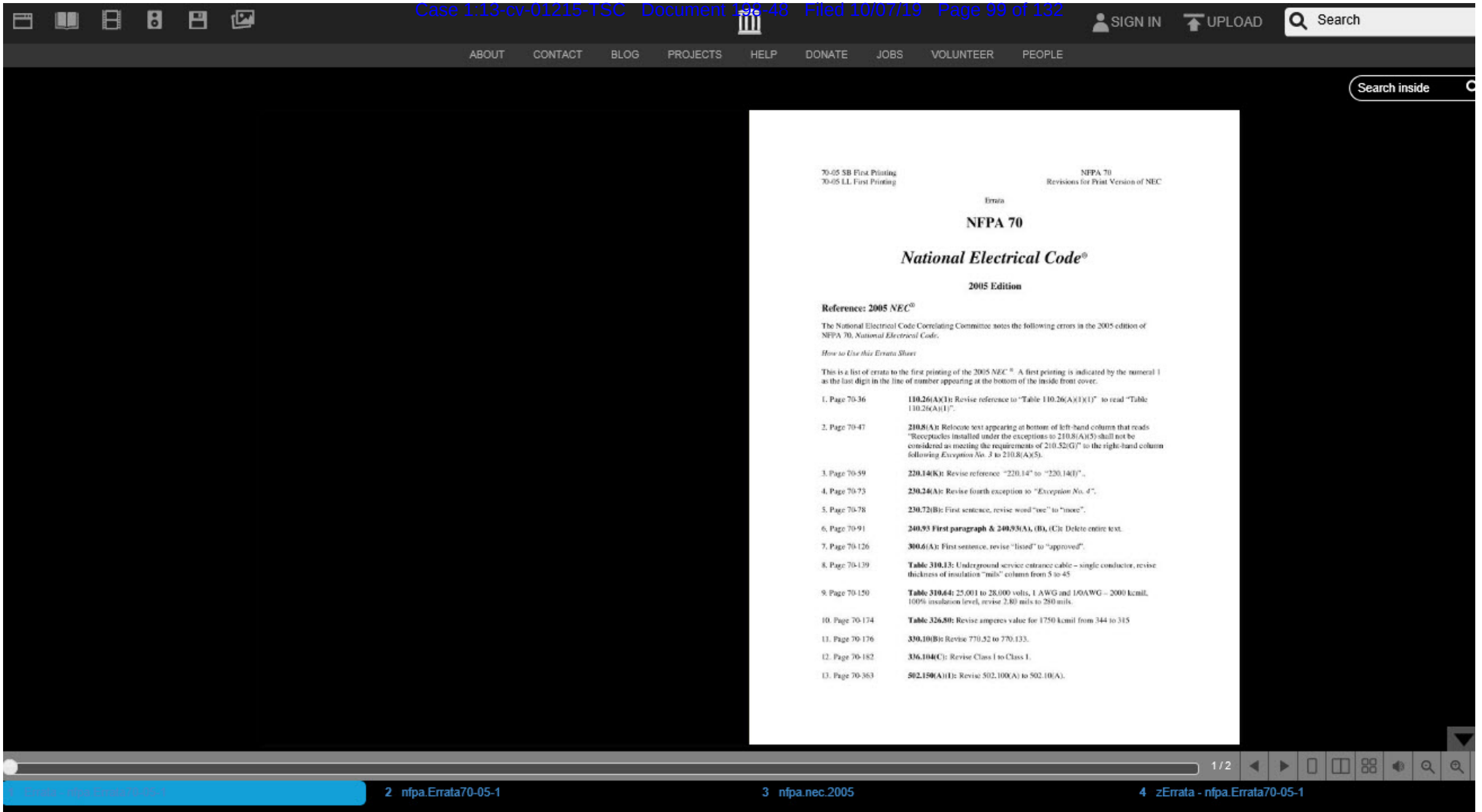
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## NFPA 70: National Electrical Code

by National Fire Protection Association

Publication date: 2005-01-01  
 Usage: CC0 1.0 Universal  
 Topics: federalregister.gov, public.resource.org  
 Collection: publicsafetycode; USGovernmentDocuments; additional\_collections  
 Language: English

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You are urged to check with the standards organizations or governmental authorities for further information and access to definitive versions of these important laws.

BY ORDER OF THE EXECUTIVE DIRECTOR  
 Office of the Federal Register  
 Washington, D.C.

By Authority of the Code of Federal Regulations: 49 CFR 192.189(c)

Name of Legally Binding Document: NFPA 70: National Electrical Code  
 Name of Standards Organization: National Fire Protection Association

### LEGALLY BINDING DOCUMENT

This document has been duly INCORPORATED BY REFERENCE into Federal Regulations and shall be considered legally binding upon all citizens and residents of the United States of America.

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Errata  
 Errata 05-1 (issued 12/24/2004)

Identifier: gov.law.nfpa.nec.2005  
 Identifier-ark: ark:/13960/t34184v9f  
 Ocr: ABBYY FineReader 11.0 (Extended OCR)  
 Ppi: 300  
 Year: 2005

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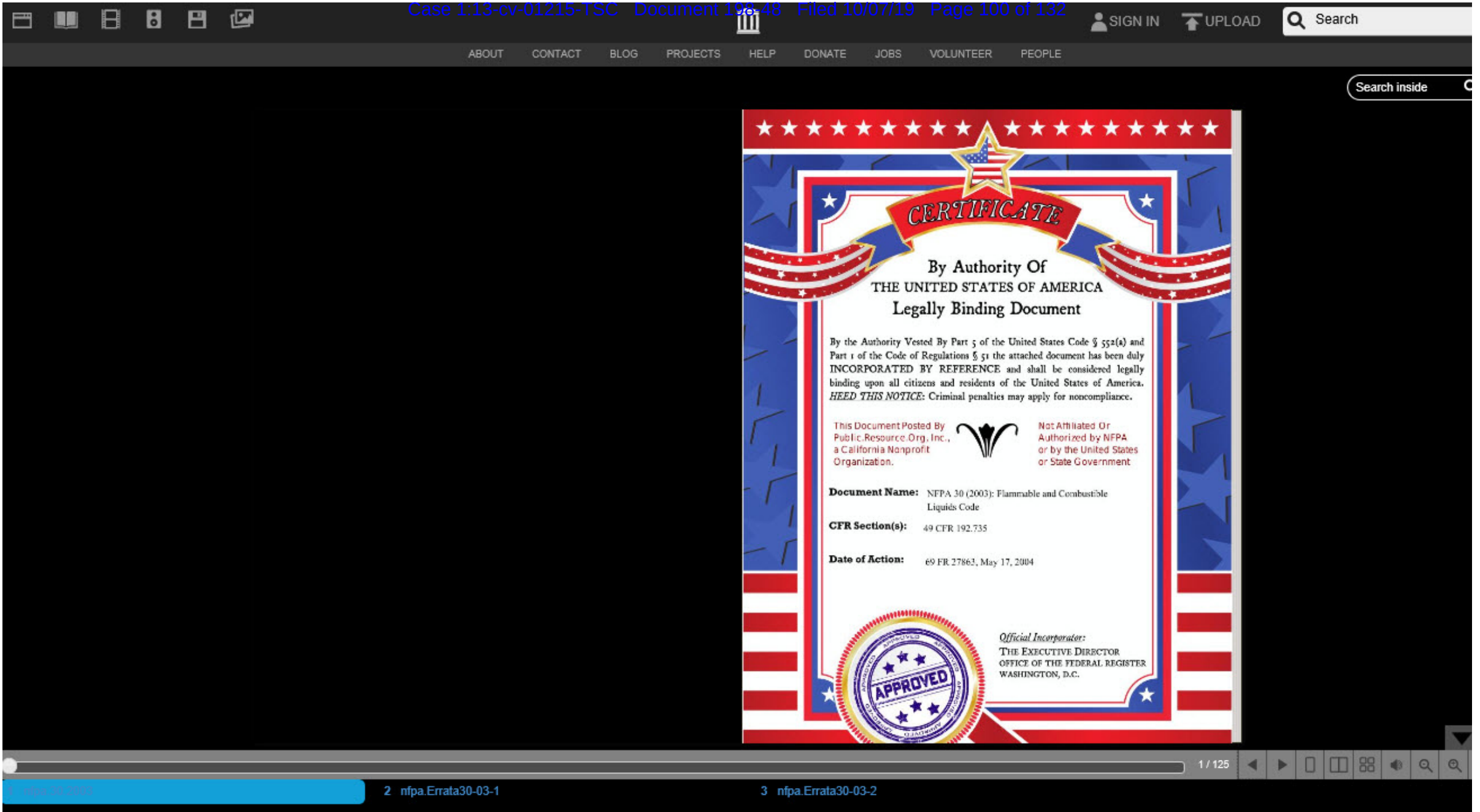
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## NFPA 30: Flammable and Combustible Liquids Code

by National Fire Protection Association

Publication date [2003](#)  
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 Topics [federalregister.gov](#), [public.resource.org](#)  
 Collection [publicsafetycode](#); [USGovernmentDocuments](#); [additional\\_collections](#)  
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*You are urged to check with the standards organizations or governmental authorities for further information and access to definitive versions of these important laws.*

**BY ORDER OF THE EXECUTIVE DIRECTOR**  
Office of the Federal Register  
Washington, D.C.

*By Authority of the Code of Federal Regulations: 49 CFR 192*

**Name of Legally Binding Document:** NFPA 30: Flammable and Combustible Liquids Code  
**Name of Standards Organization:** National Fire Protection Association

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This document has been duly INCORPORATED BY REFERENCE into federal regulations and shall be considered legally binding upon all citizens and residents of the United States of America.

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 Ocr [ABBYY FineReader 11.0 \(Extended OCR\)](#)  
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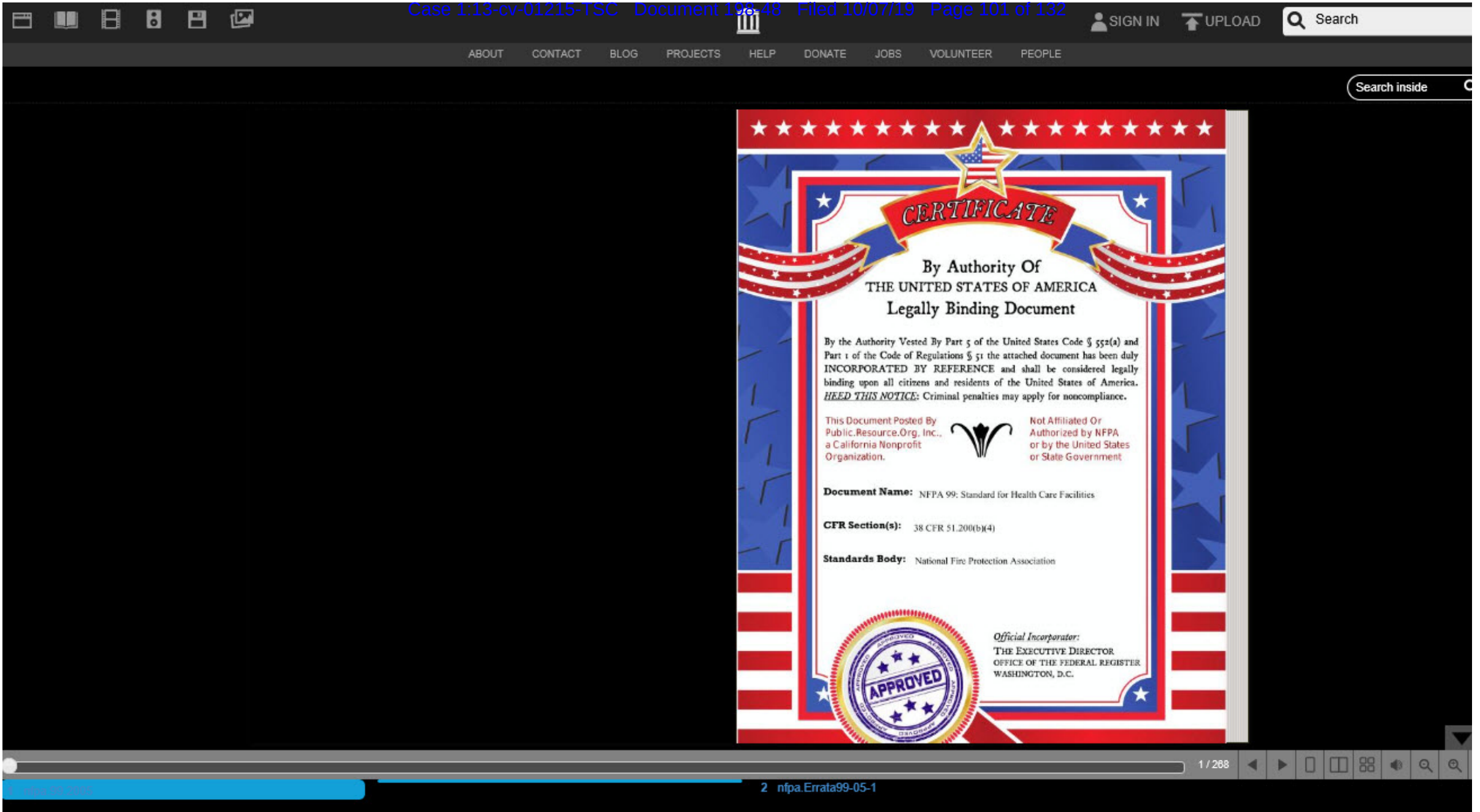
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## NFPA 99: Standard for Health Care Facilities

by National Fire Protection Association

Publication date [2005](#)  
 Usage [CC0 1.0 Universal](#)   
 Topics [federalregister.gov](#), [public.resource.org](#)  
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**BY ORDER OF THE EXECUTIVE DIRECTOR**  
Office of the Federal Register  
Washington, D.C.

By Authority of the Code of Federal Regulations: 38 CFR 51.200(b)(4)

**Name of Legally Binding Document:** NFPA 99: Standard for Health Care Facilities  
**Name of Standards Organization:** National Fire Protection Association

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Errata

**NFPA 70<sup>®</sup>**

*National Electrical Code<sup>®</sup>*

**2011 Edition**

**Reference:** Various  
**Errata No.:** 70-11-1

The National Electrical Code Correlating Committee notes the following errors in the 2011 edition of NFPA 70, *National Electrical Code*.

*How to Use this Errata Sheet*

This is a list of errata to the first printing of the 2011 NEC<sup>®</sup>. A first printing is indicated by the numeral 1 as the last digit in the line of number appearing at the bottom of the first page.

1. Page 70-36 **110.14(C)(1)**: Revise 310.15(B)(6) to 310.15(B)(7)
2. Page 70-78 **Figure 230.1**: Revise "Source" to "Serving Utility" and 230.49 to 230.32
3. Page 70-86 **230.90 Exception No. 5**: Revise 310.15(B)(6) to 310.15(B)(7)
4. Page 70-102 **Table 250.3**: Revise 300.50(B) to 300.50(C)
5. Page 70-116 **250.68(C)(2)(b)**: Revise to read: "By bonding the structural metal frame to one or more of the grounding electrodes, as specified in 250.52(A)(5) or (A)(7) that comply with 250.53(A)(2)."
6. Page 70-129 **250.180**: Revise 250.190 to 250.191
7. Page 70-139 **300.5(C) Exception No. 2**: Revise 330.10(11) to 330.10(A)(11)
8. Page 70-148 **310.10(E) Exception No. 2 (d)**: Revise Table 310.13(D) to Table 310.104(D)
9. Page 70-148 **310.10(F)**: Remove deletion bullet and add second paragraph to read: "Cables rated above 2000 volts shall be shielded."
10. Page 70-154 **Table 310.15(B)(16)**: Add double asterisk to 18 AWG and 16 AWG copper
11. Page 70-178 **314.16(C)(1)**: Revise 314.16(C)(2) to 314.16(C)(3)
12. Page 70-240 **392.18(E)**: Revise 392.10(D) to 392.18(D)

2 Errata - nfpa.Errata70-11-2    3 nfpa.Errata70-11-1    4 nfpa.Errata70-11-2    5 nfpa.nec.2011    6 zErrata - nfpa.Errata70-11-1    7 zErrata - nfpa.Errata70-11-2

**NFPA NEC (2011): National Electrical Code**  
by National Fire Protection Association



Publication date: 2011-01-01  
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**Name of Legally Binding Document:** NFPA NEC (2011): National Electrical Code  
**Name of Standards Organization:** National Fire Protection Association

**Errata**  
[Errata 70-11-2](#) (issued 1/24/2012) (PDF, 18 KB)  
[Errata 70-11-1](#) (issued 4/8/2011) (PDF, 48 KB)

Identifier: gov.law.nfpa.nec.2011  
 Identifier-ark: ark:/13960/t0bv8p02s  
 Ocr: ABBYY FineReader 11.0 (Extended OCR)  
 Ppi: 300  
 Year: 2011

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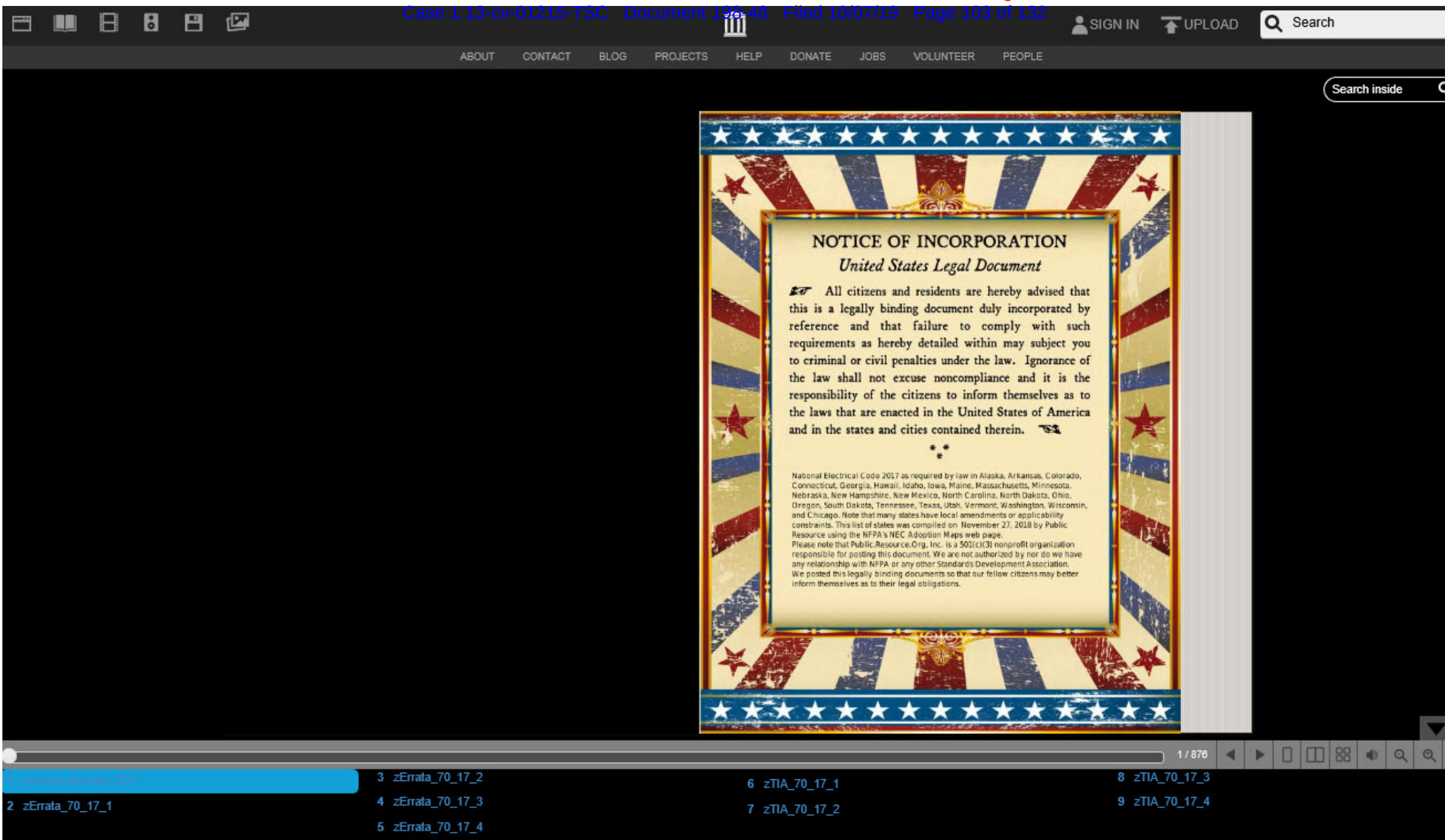
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Reviewer: [seokmin, choi](#) - ★★★★★ - August 12, 2013  
 Subject: NEC 2011  
 NEC 2011

Uploaded by  
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 on July 31, 2012



## 2017 National Electrical Code

by National Fire Protection Association in the Form of A Model Public Safety Legal Code and Subsequently Enacted Into Law By Federal, State, and Local Governmental Jurisdictions

Topics: [Binding Under State Laws](#), [Public Safety](#), [Rule of Law](#), [Informed Citizenry](#)

Collection: [publicsafetycode](#), [USGovernmentDocuments](#), [additional\\_collections](#)

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Name of Legally Binding Document: NFPA NEC (2017) National Electrical Code  
 Name of Standards Organization: National Fire Protection Association  
 Standards Organization Source: [NFPA National Electrical Code](#) (Free Access Available Form Original Publisher)  
 Name of Incorporating Jurisdictions: (Source: [NFPA Adoption Maps](#) (Last accessed November 27, 2018). Alaska, Arkansas, Colorado, Connecticut, Georgia, Hawaii, Idaho, Iowa, Maine, Massachusetts, Minnesota, Nebraska, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oregon, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wisconsin, and Chicago. PLEASE CONSULT THE NFPA [Tentative Interim Amendment and Errata Site](#) FOR ANY IMPORTANT UPDATES.

### Notes

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## Reviews

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Case 1:13-cv-01215-TSC Document 198-48 Filed 10/07/19 Page 127 of 132

# **EXHIBIT 173**

From: "ghartford" <ghartford@hartfordengineering.com> on behalf of ghartford  
Sent: Thu 5/17/2018 1:42 PM (GMT-07:00)  
To: "Carl Malamud" <carl@media.org>  
Cc:  
Bcc:  
Subject: RE: Contact Page

Mr. Malamud:

Thank you for your timely response, but I don't believe we were asking for legal advice. We have outside legal counsel for that.

We were asking two (2) simple, yet what we believe to be fair, questions:

1. How do you make documents available and not violate copyright laws?
2. How might we access the documents you offer?

Thank you once again for your timely consideration and response.

**HARTFORD ENGINEERING**

Gerald D. Hartford, Jr., PE, LEED AP, GPD (Jerry)

Principal / Mechanical Engineer

11440 West Bernardo Court – Suite 202

San Diego, CA 92127

858-337-7712

[ghartford@hartfordengineering.com](mailto:ghartford@hartfordengineering.com)

[www.hartfordengineering.com](http://www.hartfordengineering.com)

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**From:** Carl Malamud [mailto:carl@media.org]

**Sent:** Thursday, May 17, 2018 1:33 PM

**To:** ghartford <ghartford@hartfordengineering.com>

**Subject:** Re: Contact Page

Sorry, I'm not a lawyer and I'm certainly not your lawyer and I'm not about to give you legal advice, which is what you are asking for.

On Thu, May 17, 2018 at 1:30 PM, ghartford <[ghartford@hartfordengineering.com](mailto:ghartford@hartfordengineering.com)> wrote:

Mr. Malamud:

We just recently learned (from a colleague) of your 501(C)(3) corporation and the work you do at [Public.Resource.Org](http://Public.Resource.Org).

Being in the engineering business, we are obligated to design buildings in accordance with building codes.

We spend significantly for access to such codes. It always seemed interesting that we should have to pay for what we are obligated to implement. But we have done so for years. It's just the way it's always been done.

The challenge we have is ensuring access to relevant, current codes (whole codes – not just errata) for the states and municipalities in which we provide our engineering services.

We provide engineering services in multiple states, therefore we require different codes, i.e. obviously the CA codes, but as well International codes (ICC), Uniform codes (IAPMO), ASME standards, NFPA standards, ANSI standards, etc.

Please confirm for us how you make documents available and not violate copyright laws, i.e. current and past documents.

Then please share with us how we might access the documents you offer.

Thank you in advance for your timely consideration and response.

**HARTFORD ENGINEERING**

Gerald D. Hartford, Jr., PE, LEED AP, GPD (Jerry)

Principal / Mechanical Engineer

11440 West Bernardo Court – Suite 202

San Diego, CA 92127

858-337-7712

[ghartford@hartfordengineering.com](mailto:ghartford@hartfordengineering.com)

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From: Heady, Ralph  
Sent: Mon 7/23/2018 6:06 AM (GMT-07:00)  
To: "Carl Malamud" <carl@media.org>  
Cc:  
Bcc:  
Subject: RE: Contact Page

Does Friday's decision mean you can update the site?

Thanks for responding to the earlier email,

Ralph D. Heady  
Engineering Project Designer  
Architecture and Engineering  
Gaddis Physical Plant  
1845 Fairmount  
Wichita, Kansas 67260-0023  
[ralph.HEADY@wichita.edu](mailto:ralph.HEADY@wichita.edu)  
978-7914

**From:** Carl Malamud [mailto:carl@media.org]  
**Sent:** Friday, July 20, 2018 3:56 PM  
**To:** Heady, Ralph  
**Subject:** Re: Contact Page

A federal judge has forbidden me from updating that page. Google my name and standards and copyright.

On Fri, Jul 20, 2018 at 1:34 PM Heady, Ralph <[Ralph.Heady@wichita.edu](mailto:Ralph.Heady@wichita.edu)> wrote:

I was searching for a standard the other day and noticed the page I was looking at (Guide to State and Local Public Safety Codes) says it was last updated in 2014. Are there any updates forthcoming?

Also, do you have a list of the latest Codes? As some are not published annually I was wondering if there is a list of the latest. Mostly the IBC, IRC, IEBC, IMC, IPC, IFGC and IECC. How about a breakdown of the NFPA family?

Thanks,

Ralph D. Heady  
Engineering Project Designer  
Architecture and Engineering  
Gaddis Physical Plant

1845 Fairmount

Wichita, Kansas 67260-0023

ralph.heady@wichita.edu

978-7914

**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>
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**DECLARATION OF JAMES S. THOMAS**

I, James S. Thomas, 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 Vice President, Sales & Marketing for American Society for Testing and Materials (“ASTM”).
4. ASTM offers training courses on the standards that it develops. ASTM offers several types of training: e-learning modules, in-person training hosted by ASTM in cities across the U.S., onsite training customized to various organizations or department needs, and webinars.

5. ASTM's training courses are targeted at specific industries and disciplines. For example, ASTM offers trainings for additive manufacturing, building and construction, coal, corrosion, environmental, metals, oxygen, petroleum, plastics, rubber, and textiles.

6. Within those broad categories, ASTM offers a variety of training courses to help users better utilize ASTM's standards.

7. ASTM includes its standards as reference materials with its training courses.

8. ASTM offers a variety of onsite or in-person training courses, including:

a. Since at least 1996, ASTM has offered an in-person training course on Diesel Fuels: Specifications and Test Methods. The course materials include: ASTM's D86, D975, D1266, D1552, D2622, D3120, D4177, and D4294. Attached as Exhibit 1 is a true and correct copy of the description of ASTM's Diesel Fuels: Specifications and Test Methods course available at <https://www.astm.org/TRAIN/filtrexx40.cgi?-P+ID+28+traindetail.frm>.

b. Since at least 1996, ASTM has offered an in-person training course on Gasoline: Specifications, Testing, and Technology. The course materials include ASTM's D86. Attached as Exhibit 2 is a true and correct copy of the description of ASTM's Gasoline: Specifications, Testing, and Technology available at <https://www.astm.org/TRAIN/filtrexx40.cgi?-P+ID+4+traindetail.frm>.

c. Since at least 1996, ASTM has offered a two-day, on-site training course on Textiles: Quality and Performance Standards. The course materials include ASTM's D5489. Attached as Exhibit 3 is a true and correct copy of the description of ASTM's Textiles course available at <https://www.astm.org/TRAIN/filtrexx40.cgi?-P+ID+25+traindetail.frm>.

d. Since at least 1997, ASTM has offered a three-day, in-person training course on Marine Fuels: Specifications, Testing, Purchase, and Use. The course materials include D1298, and D4294. Attached as Exhibit 4 is a true and correct copy of the description of ASTM's Marine Fuels course available at <https://www.astm.org/TRAIN/filtrexx40.cgi?-P+ID+18+traindetail.frm>.

e. ASTM's Fuels Technology course is a five-day, in-person training. The course materials include: ASTM D86, D975, D1298, and D4294. Attached as Exhibit 5 is a true and correct copy of the description of ASTM's Fuels Technology course available at <https://www.astm.org/TRAIN/filtrexx40.cgi?-P+ID+392+traindetail.frm>.

f. ASTM's Crude Oil: Sampling, Testing and Evaluation course is a three-day, in-person training. The course materials include: D1298, D2622, D4177, and D4294. Attached as Exhibit 6 is a true and correct copy of the description of ASTM's Crude Oil course available at <https://www.astm.org/TRAIN/filtrexx40.cgi?-P+ID+51+traindetail.frm>.

9. Similarly, ASTM includes its standards as reference material for its e-learning modules, including:

a. ASTM's #2 Diesel Fuel Certificate Program includes video demonstrations, checklists, presentations, data sheets and glossaries designed to address the 24 standards in the program, including D86, D1298, D2622, and D4294. Each of the 24 standards has its own learning module, and a copy of the standard is included in the price of the training. Attached as Exhibit 7 is a true and correct copy of the description of ASTM's #2 Diesel Fuel Certificate Program available at [https://www.astm.org/TRAIN/train\\_136.htm](https://www.astm.org/TRAIN/train_136.htm).

b. ASTM's Petroleum Lab Technician Series is a series of e-learning courses. The training bundle includes a training module on ASTM's D611. The e-learning module includes ASTM D611 as reference material for the course. Attached as Exhibit 8 is a true and correct copy of the description of ASTM's Petroleum Lab Technician Series available at [https://www.astm.org/TRAIN/train\\_226.htm](https://www.astm.org/TRAIN/train_226.htm).

c. ASTM's e-Learning module on ASTM E23 Standard Test Methods for Notched Bar impact testing of Metallic Materials, which includes a copy of ASTM E23. Attached as Exhibit 9 is a true and accurate copy of the description of ASTM's e-Learning module on E23 Standard Test Methods available at <https://www.astm.org/TRAIN/filtrexx40.cgi?+-P+ID+224+traindetail.frm>.

10. Unlike ASTM, ASTM's competitors typically cannot and do not provide copies of ASTM's standards to their customers, at least in part because ASTM's competitors are prohibited from reproducing ASTM's standards without acquiring a license from ASTM. As a result, ASTM's ability to offer excerpts or copies of its standards with its training courses gives ASTM an advantage over its competitors.

11. If ASTM was unable to fund its standard development through the sale of its copyrighted standards, ASTM could not fund its standards development mission. The revenues associated with ASTM's training program could not compensate for the loss of such revenue to fund the cost of ASTM's standard development expenses.

12. ASTM provides free, read-only access to view incorporated standards online in its Reading Room. ASTM views this information as educational and central to its overall mission.

13. However, the provision of this free resource does not compete with ASTM's sale of ASTM's standards because the standards available in the Reading Room are carefully restricted to prevent download or copying.

14. Although industry professionals and tradespeople who purchase ASTM's standards to use in the course of their work might reference the ASTM's Reading Room, it is not a substitute for purchasing a copy.

15. Rather, ASTM's Reading Room serves as an opportunity for ASTM to promote its products and service offerings, including the sale of its standards and training modules.

16. By providing unrestricted, downloadable PDF and HTML copies of ASTM's standards, Public Resource directly competes with ASTM's sale of its individual standards, volume sales, and other educational resources.

17. The harm resulting from Public Resource's posting and dissemination of such unrestricted copies of ASTM's works for free is not limited to the exact version of the ASTM work Public Resource copies. For many users, prior versions of ASTM's works may be a perfect or near perfect substitute that interferes with the market for the current version of ASTM's standards.

\* \* \*



I declare under the penalty of perjury under the laws of the United States of America that the foregoing is true and correct pursuant to 28 U.S.C. § 1746.

Dated: October 4, 2019



James S. Thomas

Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 7 of 45

# **EXHIBIT 1**

## Diesel Fuels: Specifications and Test Methods



**Early Bird Fee:** \$1,395.00

**Price:** \$1,550.00

### Register Online:

In order to register, please enter the number of attendees in the appropriate box below and click add attendees.

#### New Orleans, LA

12/3/2019 - 12/5/2019

Royal Sonesta New Orleans  
300 Bourbon Street  
New Orleans, LA 70130

504-586-0300

#### Las Vegas, NV

3/24/2020 - 3/26/2020

**Number of Attendees**

ADD ATTENDEES

**Number of Attendees**

ADD ATTENDEES

#### Detroit, MI

4/28/2020 - 4/30/2020

**Number of Attendees**

ADD ATTENDEES

### Early Bird Discount

ASTM automatically applies a discount of 10% when participants register 60 days prior to the start of the class.

***\*After the early bird period expires, registrations are subject to standard pricing.***

### About the Course

This course covers a wide range of diesel fuel issues including specifications (ASTM D975 and other standards), test methods, sampling and quality control, distribution, current issues and alternate fuels like biodiesel.

There will be extensive discussion of diesel fuel lubricity, low temperature operability, and sulfur content. Participants will gain an understanding of the interconnection of diesel fuel with other fuels and the impacts of quality requirements on refinery production and product availability.

### Learning Outcomes

By the end of this course you will be able to:

- Discuss the significance of the requirements
- Interpret product inspections
- Describe the impact of product quality on diesel engine applications
- Discuss current fuel issues and challenges.

### Who Should Attend

Anyone needing an understanding of diesel fuel specifications, test methods, sampling, quality control and current diesel fuel issues. The course is appropriate for a wide-range of people, including: laboratory technicians, laboratory managers, refinery engineers, blending operators, pipeline operators, quality assurance personnel, new staff in fuels-related positions, alternative fuel producers, state regulatory officials, researchers, marketers, environmental scientists, and even lawyers and administrators involved with diesel fuels.

The course is especially suitable for those new to fuels, in both hands-on positions and professional, supervisory or managerial roles in:

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- Petroleum companies
- Pipeline and terminal operation
- Petroleum testing laboratories
- Federal, state / provincial and local regulatory agencies
- Fuel marketers and purchasing department
- Engine and fuel injection / fuel system manufacturers
- Environmental companies
- Consumer groups
- Attorneys involved in petroleum-related litigation

A technical or scientific background is not required.

#### Course Description

Registration: 8:00-8:30 AM on the first day

Class: 8:30 AM-4:30 PM on the first two days. Following lunch on the third day the class will tour a testing laboratory if possible.

#### Day 1

- Crude oil to petroleum products
- Diesel fuel specifications
- Diesel fuel test methods: lubricity, low temperature operability, sulfur

#### Day 2

- Diesel fuel - additional requirements
- Chemistry & refining
- Diesel Fuel Additives
- On-Highway / Off-highway / locomotive / marine / heating oil
- Alternative diesel fuels including paraffinic diesel and biodiesel
- Diesel fuel & diesel engine issues

#### Day 3

- Key ASTM Guide
- Static electricity & microbial contamination
- Storage & handling
- Sampling practices
- Quality Assurance / Quality Control / Repeatability / Reproducibility
- Recent diesel fuel issues
- Tour of a testing facility, OEM site or terminal operation, as possible.

#### Referenced Documents

D56, D86, D93, D130, D445, D482, D524, D613, D975, D976, D1266, D1319, D1552, D1796, D2274, D2500, D2622, D2624, D2709, D2880, D2887, D3120, D3828, D4057, D4177, D4294, D4306, D4308, D4539, D4737, D4865, D5453, D5771, D5772, D5773, D5854, D6079, D6217, D6371, D6468, D6469, D6751, D6890, D7039, D7170, D7371, D7467, D7501, D7619, D7688, E39

#### Fee Includes

- Referenced ASTM standards and course notes
- Transportation to and from tour site
- Coffee breaks
- Course Completion Certificate with 2.1 Continuing Education Units (CEUs)

#### About the Instructor

**Andy Pickard** has worked in fuels and lubricants for more than 45 years. He has been a member of ASTM International for 35 years, participating in test method developments and product specification committees (diesel fuel and other middle distillate fuels, biodiesel, gasoline, ethanol, LPG, aviation fuels, and heavy fuel oils). Following academic training in chemistry with a doctorate in organometallic chemistry, he spent 10 years with Imperial Oil (Exxon Mobil in Canada) and 24 years with Petro-Canada. A good part of that time was spent working between refineries, distribution, marketers and customers on fuel issues. He is now a consultant on fuels and technology support, and continues to participate in both ASTM and CGSB (Canadian General Standards Board) fuel standard developments.

#### About Sponsoring Committee

ASTM is one of the world's largest technical standards development organizations. ASTM standards have grown to be among the world's most widely used and accepted documents. The 82-volume *Annual Book of ASTM Standards* (available online, print, and CD-ROM) contain over 12,000 standards written by 34,000 members on our 140 technical committees. The standard referenced in this course was developed by Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants. For information on Committee D02, contact [Alyson Fick](#) at (610) 832-9710 or go to our [D02](#) technical committee page.

#### ASTM Membership

Attend this course and receive a FREE 1-year membership to ASTM International and Committee D02 on Petroleum Products and Lubricants. (Applies to new members only and may not be used to renew existing memberships.)

#### Attention: Professional Engineers

If your state has a continuing education requirement for license renewal, ASTM training courses and ASTM membership can help you meet that requirement.

#### On-Site Training Available

ASTM can bring this course to your site! This on-site training at your facility will be tailored to meet the specific needs of your organization. For more information, please contact sales [here](#) or call 1-877-909-ASTM.

#### How Learning Will Be Assessed

Learning will be assessed through discussions. Participants are expected to ask questions if an issue is unclear to them.

#### Attendee Praise

Praise from recent attendees of the course:

*"This was a great course. The instructor made it very easy to follow."*

*"It was a great training."*

*"I really enjoyed the class. Lots of information presented in a clear and concise manner."*

*"Excellent course. Will suggest this course to future diesel blenders in my organisation."*

*"It was all valuable information."*

*"Very informative and useful training. Thank you!"*

#### Related Courses

You may also be interested in these related courses:

##### Live Courses

- [EPA Tier III SQC Readiness Workshop](#)
- [Statistics in ASTM Standard Test Method Development, Application, and Quality Assurance](#)

##### Online Courses

- [ASTM Petroleum Lab Technician Series](#)

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# EXHIBIT 2

## Gasoline: Specifications, Testing, and Technology



Price: \$1,550.00

### Register Online:

In order to register, please enter the number of attendees in the appropriate box below and click add attendees.

### West Conshohocken, PA

11/19/2019 - 11/21/2019

ASTM Headquarters  
100 Barr Harbor Drive  
West Conshohocken, PA 19428

610-832-9686

Number of Attendees

ADD ATTENDEES

### Early Bird Discount

ASTM automatically applies a discount of 10% when participants register 60 days prior to the start of the class.

***\*After the early bird period expires, registrations are subject to standard pricing.***

### About the Course

This extensive 3-day class provides broad coverage of the specifications, testing and technology related to gasoline. You'll learn about the different types and components of gasoline, ways to enhance octane, the various types of volatility, the purpose of sampling, and the stages of drivability. The course covers specifications related to gasoline, discusses gasoline additives, oxygenates, the refining process, the quality and distribution of fuels, and much more.

The class is taught in a participatory atmosphere. In addition to the course workbook, you will also receive a copy of ASTM's manual on *Significance of Tests for Petroleum Products*, as well as copies of various ASTM standards.

### Learning Outcomes

By the end of this course you will be able to:

- Recall how gasoline and compositional variables affect engine performance
- Recall how to interpret test data to determine if gasoline meets required specifications and regulations
- Recall how to use octane blending equations and calculate volatility parameters
- Define how quality is maintained throughout the distribution system
- Discuss gasohol and other ethanol mixtures in gasoline
- Discuss reformulated gasoline, and the requirements mandated by the 1990 amendments to the Clean Air Act.

### Who Should Attend

A scientific background is not required for this course. It is intended for:

- Petroleum company employees
- Federal, state, and local regulatory personnel
- Laboratory supervisors
- Fuel marketing personnel
- Pipeline company employees
- Engine mfg. and testing personnel
- Attorneys involved in fuels regulatory activity
- Anyone involved in the purchase, sale, operations, or distribution of gasoline.

Registration: 7:30 AM-8:00 AM on first day  
Class: 8:00 am-4:00 pm on the first two days. Following lunch on the third day, the class will tour a lab.

**Day 1**

- Gasoline Composition, Chemistry, Production, Blending, and Specs
- Octane Measurements and Enhancers
- CRC Vehicle Satisfaction Programs
- Octane Requirement Increase Altitude and Climatic Adjustments  
Phase Separation and Water Tolerance Importance of Volatility
- Vapor Pressure and Vapor Liquid Ratio
- Distillation
- ASTM Volatility Classes
- Cold and Hot Starting and Drivability
- CRC Drivability Programs
- Drivability Indices
- Evaporative and Exhaust Emissions
- Impact of Volatility Regulations

**Day 2**

- Additives and Their Chemistry
- Oxidation and Corrosion Inhibitors
- Metal Deactivators
- Engine Deposit Control Additives
- Oxygenates
- Chemistry of Alcohols and Ethers
- Effects of Ethanol and Other Oxygenates
- Effects on Volatility and Emissions
- Water Sensitivity
- CRC Oxygenate Drivability Programs Materials Compatibility
- Reformulated Gasoline Requirements
- Gasoline Distribution

**Day 3**

- Clean Air Act and 1991 Amendments
- Reformulated Gasoline
- EPA Testing Requirements
- Regulatory Issues
- Ozone Depletion
- Carbon Monoxide Reduction
- Maintenance of Quality
- Tour of a Fuel Testing Laboratory

**ASTM Standards Referenced**

## Test Methods

- D86 Distillation of Petroleum Products
- D130 Detection of Copper Corrosion from Petroleum Products by Copper Strip Tarnish Test
- D381 Existent Gum in Fuels by Jet Evaporation
- D525 Oxidation Stability of Gasoline
- D1319 Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption
- D3606 Benzene and Toluene in Finished Motor and Aviation Gasoline by Gas Chromatography
- D4057 Standard Practice for Manual Sampling of Petroleum and Petroleum Products
- D4806 Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel
- D4814 Standard Specification for Automotive Spark-Ignition Engine Fuel
- D4815 Determination of MTBE, ETBE, TAME, DIPE, tertiary-Amyl Alcohol and C1 to C4 Alcohols in Gasoline by Gas Chromatography
- D5798 Standard Specification for Ethanol Fuel Blends for Flexible-Fuel Automotive Spark-Ignition Engines

## Manuals

- Significance of Tests for Petroleum Products

**Fee Includes**

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- All referenced ASTM standards are provided
- Transportation to and from tour site
- Coffee breaks
- Course Completion Certificate with 2.1 Continuing Education Units (CEUs)

#### About the Instructor

**Salvatore J. Rand** is an ASTM Fellow and a consultant in motor and aviation fuel technology. He is vice-chairman of ASTM Committee D-2 on Petroleum Products and Lubricants, former chairman of Subcommittee 5 on Properties of Fuels, and secretary of the section on Color and Reactivity. He is retired from the Fuels Research Division of Texaco's R&D Department. Rand received his B.S. degree in chemistry from Fordham University and his Ph.D degree in physical chemistry from Rensselaer Polytechnic Institute.

#### About Sponsoring Committee

ASTM is one of the world's largest voluntary standards development organizations. ASTM standards have grown to be among the world's most widely used and accepted documents. The 82-volume *Annual Book of ASTM Standards* contain over 13,000 standards written by 34,000 members on our 140 technical committees. The standards referenced in this course were developed by Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants. For information on Committee D02, contact [Alyson Fick](#) at (610) 832-9710 or go to our [D02](#) technical committee page.

#### ASTM Membership

Attend this course and receive a FREE 1-year membership to ASTM International and Committee D02 on Petroleum Products and Lubricants. (Applies to new members only and may not be used to renew existing memberships.)

#### Attention: Professional Engineers

If your state has a continuing education requirement for license renewal, ASTM training courses and ASTM membership can help you meet that requirement.

#### On-Site Training Available

ASTM can bring this course to your site! On-site training courses can also be tailored to meet your specific needs. For more information, please contact sales [here](#) or call 1-877-909-ASTM.

#### How Learning Will Be Assessed

Learning will be assessed through a series of question and answer sessions.

#### Questions About the Training Course

For information on this training course, please contact [Training](#) or call (610) 832-9695.

#### Attendee Praise

Praise from recent attendees of the course:

*"Sal was a great instructor. He answered all of my questions."*

*"Sal Rand is an excellent instructor; very professional, encouraged participation, a wealth of experience and knowledge, and shared wonderful anecdotes relevant to material."*

*"Sal was very knowledgeable."*

*"Great instructor."*

*"Very informative. Easily understandable."*

*"Instructor was very knowledgeable and very good."*

*"I would say that just about everything was really valuable."*

*"Great course with experienced and friendly instructor."*

*"Excellent instructor."*

#### Related Courses

You may also be interested in these related courses:

Live Courses

Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 15 of 45

- [EPA Tier III SO<sub>x</sub> Readiness Workshop](#)
- [Statistics in ASTM Standard Test Method Development, Application, and Quality Assurance](#)

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- [ASTM Petroleum Lab Technician Series](#)

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# EXHIBIT 3

## Textiles: Quality and Performance Standards



### On-Site Training Available

ASTM can bring this course to your site! On-site training courses can also be tailored to meet your specific needs. For a quote or more information, please contact sales [here](#) or call 1-877-909-ASTM.

### About the Course

This two-day course will give you a basic understanding of ASTM standards commonly used for testing fabrics, apparel, and household textiles. It will also give you an overview of the ASTM care labeling symbols.

### Learn How To:

- Use these specific test methods and material specifications to establish fabric acceptability and performance
- Establish product requirements for certification
- Perform the mechanical and fabric performance test methods
- Calculate the test results and show reporting techniques
- Use the precision and bias procedures and applications
- Use ASTM care symbols on textile and apparel care labels

### Who Should Attend

Anyone involved in the purchasing, testing, and evaluation of textile fabrics and apparel, including laboratory managers and technicians from industry or government textile testing laboratories.

### On-Site Fees

- Referenced ASTM standards
- Course notes
- Certificate of Attendance with 1.4 Continuing Education Units (CEUs)

### Course Outline

This course will be tailored to meet the needs of your individual organization. Topics covered include:

- Conditioning Textiles for Testing Mechanical Test Methods
- Mechanical Test Methods
- Air Permeability
- Test Strength
- Tongue Tear
- Fabric Count of Woven Fabric
- Mass (Weight) Per Unit Area
- Ball Burst
- Breaking Strength and Elongation of Textile Fabrics
- Performance Methods
- Failure in Sewn Seams of Woven Fabric
- Abrasion Resistance of Textile Fabrics (Rotary Perform)
- After Wash Appearance
- Surface Water Absorption of Terry Fabrics
- Care Labeling and Evaluation Practices
- Evaluation of Mens' and Boys' Home Launderable WoveShirts
- Care Symbols for Permanent Care Labels on Consumer
- Textile Products
- Development of Product
- Specifications and Product Certification Requirements

### ASTM Standards Referenced

#### Test Methods

- D434 Resistance to Slippage of Yarns in Woven Fabrics Using a Standard Seam
- D737 Air Permeability of Textile Fabrics

- D1424 Tearing Strength of Fabrics by Pulling Perforated Tapes (Elmendorf) Apparatus
- D1683 Failure in Sewn Seams of Woven Fabrics
- D1776 Conditioning Textiles for Testing Guides
- D2261 Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure
- D3512 Random Tumble Pilling Tester Method
- D3775 Fabric Count of Woven Fabric
- D3776 Mass Per Unit Area (Weight) of Fabric
- D3786 Diaphragm Bursting Strength Tester Method
- D3787 Bursting Strength of Knitted Goods Ball Burst Method
- D3884 Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method)
- D3940 Bursting Strength and Elongation of Sewn Seams
- D4151 Flammability of Blankets
- D4231 Evaluation of Men's and Boy's Home Launderable Woven Dress Shirts and Sport Shirts
- D4685 Pile Retention of Corduroy Fabrics
- D4772 Surface Water Absorption of Terry Fabrics (Water Flow Test Method)
- D5034 Breaking Strength and Elongation of Textile Fabrics (Grab Test)
- D5035 Breaking Strength and Elongation of Textile Fabrics (Strip Method)
- D5489 Care Symbols/Care Instructions on Textile Products
- D5733 Tearing Strength of Nonwoven Fabrics by the Trapezoid Procedure Practices

#### Instructor

**Ellen Roaldi** is a Senior Technical Consulting Specialist in the Softlines area and has been with Bureau Veritas Consumer Products Services for 23 years. In her current position, Ellen is responsible for providing support globally for client initiatives as well as internal operations. This includes training clients and staff in testing theory and methodology, consulting, auditing and advising on technical information, reviewing and authoring procedural/client manuals, interpreting test results, and serving on several industry committees.

Prior to this position, Ellen provided program management services for key clients as well as assisting the regulatory team with interpretations of federal laws. Ellen also provided technical support in the textile laboratory while working previously in operations. Before joining Bureau Veritas, Ellen worked as a Quality Engineer for Talon/Textron, and as a Systems/Quality Engineer at Carborundum.

Ellen holds a Bachelor of Science in Textiles from Philadelphia University (formerly known as the Philadelphia College of Textiles and Science). She is a member of the American Apparel and Footwear Association (AAFA), ASTM International, the American Association of Textile Chemists and Colorists (AATCC), and the International Bedding and Law Officials (ABFLO). Ellen also serves on the Industry Advisory Board for the Textile Program at the State University College at Buffalo.

#### ASTM and Committee D13 on Textiles

ASTM is a world leader in the development of voluntary consensus standards. The 82-volume Annual Book of ASTM Standards, available in print and online, contain over 13,000 standards written by 140 ASTM technical committees. The standards referenced in this course were developed by Committee D13 on Textiles. For information on Committee D13, contact [Jennifer Rodgers](#) at (610) 832-9694 or go to our [D13](#) technical committee page.

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# EXHIBIT 4

Marine Fuels: Specifications, Testing,  
Purchase, and Use



**Early Bird Discount**

ASTM automatically applies a discount of 10% when participants register 60 days prior to the start of the class.

***After the early bird period expires, registrations are subject to standard pricing.***

**About the Course**

This class explains how the properties of marine fuels affect fuel handling, combustion, and cost. It provides a detailed understanding of fuel quality requirements, and why they are necessary for good handling and combustion performance. Class interaction will be stressed by using practical examples of applications of the course material to past and current problems.

**Learning Outcomes**

By the end of this course you will be able to:

- Recall the history of marine fuel
- Describe how properties of marine fuels affect fuel handling, combustion and cost
- Describe the sampling process
- Take precautions to decrease fuel contamination.

**Who Should Attend**

Supervisors and managers in laboratory operations; purchasing; fuel supply and handling; and quality control. Also for shipping company employees, and those dealing with the sale, purchase, trade, or use of marine fuels, who need a detailed understanding of fuel quality requirements and why they are necessary for good handling and combustion performance.

(Not intended as a training course for lab technicians or those who run the tests, because it does not address detailed conduct of the various test methods.)

**Course Description**

Registration: 7:30 am-8:00 AM on first day.

Class: 8:00 AM-4:30 PM. Following lunch on the third day, the class will tour a testing laboratory.

**Day 1**

- Brief History of Marine Fuel
- Marine Fuel Specifications
- Chemistry Primer
- Crude Quality/Characteristics
- Refining (Fuels Manufacture)
- Refining (Blending Practices)

**Day 2**

- Quality Parameters, Significance and Testing
- Sampling
- Current Marine Fuel Quality
- IMO Environmental Issues/Low Sulphur/ECA/GHG - Marpol Annex VI
- Diesel Engines
- Ignition Quality

**Day 3**

- Fuel Purchasing
- Fuel Pre-treatment (Centrifuging)
- Fuel Handling and Delivery
- Fuel Contamination
- Resolution of Conflicts

**ASTM Standards Referenced**

Specification

Test Methods

- D93 Flash Point by Pensky-Martens Closed Cup Tester
- D95 Water in Petroleum Products & Bituminous Materials by Distillation
- D97 Pour Point of Petroleum Products
- D189 Conradson Carbon Residue of Petroleum Products
- D445 Kinematic Viscosity of Transparent & Opaque Liquids
- D482 Ash from Petroleum Products
- D976 Calculated Cetane Index of Distillate Fuels
- D4294 Sulfur in Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy
- D4530 Determination of Carbon Residue (Micro-Method)
- D4737 Calculated Cetane Index by Four Variable Equation
- D4870 Total Sediment in Residue Fuels

Practices

- D1298 Density, Relative Density, or API Gravity of Crude Petroleum & Liq. Petrol. Prods by Hydrometer Method

Other

- CIMAC Std.-Rec. 11, Fuel Req. for Diesel Eng.

Fee Includes

- Course workbook and all referenced standards
- Transportation for demonstrations
- Certificate of Attendance and 2.1 Continuing Education Units (CEUs)
- Coffee breaks

About the Instructor

**Robert Berner**, marine fuels and lubricants consultant, has 45 years of experience in the marine fuels research and technical service. He served in the American Merchant Marine, holds a Chief Engineers license, worked for Esso International's Tanker Department as a Repair Superintendent, served in the Exxon International Marketing Department, Industrial and Wholesale Division, and was responsible for Exxon's marine fuels sales including product quality, claim dispute resolution, and policy implementation. Following his retirement from Exxon, Berner served as sales director for a bunker dot com company. He has a Bachelor of Engineering in Marine Engineering from the State University of New York Maritime College and a Masters of Business in Management and Finance from Fairleigh Dickinson University.

About Sponsoring Committee

Organized in 1898, ASTM is one of the world's largest voluntary standards development organizations. ASTM standards have grown to be among the world's most widely used and accepted documents. The 82-volume *Annual Book of ASTM Standards* contain 13,000 standards written by 34,000 members on our 140 technical committees. Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants developed the standards used in this course. For more information, contact [Alyson Fick](mailto:Alyson.Fick@astm.org) at (610) 832-9710 or go to our [D02](#) technical committee page.

Free ASTM Membership

Attend this course and receive a FREE 1-year membership to ASTM International and Committee D02 on Petroleum Products and Lubricants. (Applies to new members only and may not be used to renew existing memberships.)

On-Site Training Available

ASTM can bring this course to your site! On-site training courses can also be tailored to meet your specific needs. For more information, please contact sales [here](#) or call 1-877-909-ASTM.

Attention: Professional Engineers

If your state has a continuing education requirement for license renewal, ASTM training courses and ASTM membership can help you meet that requirement.

How Learning Will Be Assessed



Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 22 of 45

Learning will be assessed through a series of question and answer sessions.

**Attendee Praise**

Praise from recent attendees of the course:

*"Wealth of case studies, real-world examples/experiences. Content exactly what I needed/expected, well presented, engaging."*

**Related Courses**

You may also be interested in these related courses:

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# EXHIBIT 5

## Fuels Technology Hands-On Training

### Early Bird Discount

ASTM automatically applies a discount of 10% when participants register 60 days prior to the start of the class.

***'After the early bird period expires, registrations are subject to standard pricing.'***

### About the Course

The Fuels Technology course will be most valuable to scientists and engineers whose job responsibilities include testing and usage of gasoline, diesel, and aviation fuels. This extensive 5-day course will not only benefit newcomers to this technology but also experienced fuel technologists. The instructor's vast experience in this area will allow him to focus on key issues related to fuel specifications, performance, additives, and fuel storage and distribution. His deep involvement with ASTM and his experience with global fuel issues enrich the course content. With recent trends towards environmentally friendly ultra-clean fuels, fuel specification testing procedures have attained a reasonable level of sophistication. The significance of such testing will be fully covered in this course.

The class is taught in a participatory atmosphere, comprised of a lecture section and a hands-on laboratory practical section where participants perform the prescribed test methods using the required instrumentation. In addition to the course workbook, you will also receive a copy of ASTM's manual on *Significance of Tests for Petroleum Products*, as well as copies of various ASTM standards.

### Course Topics

- Hydrocarbon chemistry, refinery processes, and fuel blending
- Gasoline engine, combustion (knocking & octane)
- Volatility (distillation, vapor pressure, vapor liquid ratio)
- Gasoline specifications and sulfur reduction
- Gasoline testing procedures, additives, oxygenates, emissions
- Jet engine fuels and combustion, specifications, testing, volatility
- Jet fuels low temperature operability, viscosity, density, and specific energy
- Properties not controlled by specifications
- Brief discussion of Distribution and Quality Control procedures
- Aviation gasoline, specifications, testing, unleaded gas
- Diesel engine, combustion principles, cetane number, specifications and testing
- Diesel engine sulfur reduction, additives, lubricity, cold flow performance
- Diesel engine emissions and microbial contamination
- Fuel Storage, fuel distribution, quality control
- Fuels of the future

### Learning Outcomes

By the end of the class you will be able to:

- Recall how gasoline and compositional variables affect engine performance
- Recall how to interpret test data to determine if gasoline meets required specifications and regulations
- Recall how to use octane blending equations and calculate volatility parameters
- Define how quality is maintained throughout the distribution system
- Discuss gasohol and other ethanol mixtures in gasoline
- Discuss reformulated gasoline, and the requirements mandated by the 1990 amendments to the Clean Air Act.

### Who Should Attend

- Scientists
- Engineers
- Plant Supervisors
- Senior Technical Staff
- Senior Plant Operators
- Laboratory Personnel

### Course Description

Registration: 7:30 AM-8:00 AM (1/25/19)  
Class Lecture: 8:00 am-12:00 pm  
Laboratory Practical: 1:00 pm-4:00 pm

Lunch will be provided.

A special five-day training course will be presented describing the specifications and testing of gasoline, diesel, and aviation fuels. Two days each will be devoted to gasoline and diesel, and one day to aviation fuel. Lectures will be presented each morning, and during the afternoons the attendees will conduct selected tests themselves in the laboratory. The presentations will discuss in detail the Standard Specifications for gasoline (ASTM D4814), for diesel fuel (D975), and aviation fuel (D1655). Additionally, gasoline topics will include chemistry, combustion, octane and octane enhancers, blending, volatility, distillation, driveability, vapor pressure and vapor liquid ratio, additives, oxygenates and worldwide gasoline specifications. The diesel topics will include diesel engine design and diesel combustion, cetane number and index, fuel grades and types, flash point, viscosity, sulfur, lubricity, detergency, cleanliness, microorganisms, cold flow performance, conductivity, and biodiesel. Aviation fuel topics will include jet engine fuels and combustion, water separation, cleanliness, volatility, density, specific energy, low temperature operability, and the specifications and testing of aviation gasoline. The standards covering the hands-on testing that the participants will conduct in the afternoons will be discussed in detail.

Day 1 and 2 - Gasoline

- Combustion
- Knocking, octane
- Volatility, Distillation
- Vapor pressure, Vapor liquid ratio
- Driveability, Worldwide gasoline specifications
- Oxygenates, Sulfur, Oxidation stability, Gums, Engine deposits
- Additives

Day 3 and 4 - Diesel

- Differences among No 1, No 2, and No 4 Diesel
- Pour and Cloud Points
- Flash Point
- Viscosity
- Copper Strip Corrosion
- Sulfur
- Ramsbottom Carbon Residue
- Lubricity, (HFRR)
- Cetane Number and Cetane Index
- Water and Sediment
- Cold Filter Plugging Point (CFPP)
- Low Temperature Flow Test (LTFT)
- Biodiesel

Day 5 - Aviation Fuels

- Manufacture, Combustion in the Jet Engine
- Testing, Water Separation, Lubricity
- Specific Energy, Viscosity
- Additives, Static Electricity, Alternative Fuel Types

#### Laboratory Practical Description

Each day following the morning lecture section, participants will perform a selection of test methods discussed during the day using the required instrumentation. This hands-on approach will reinforce the topics and subject matter discussed during the lecture session to enhance learning and retaining knowledge.

Day 1

D86 Distillation of Petroleum Products

Learning Objectives:

- Students will fully understand the scope, summary, significance and use as described in Sections 1, 4 and 5 of D86.
- Students will learn how to categorize a petroleum product by Group number 1,2,3, or 4 and use this information to determine what procedure to follow in the test method
- Students will perform and follow the step by step procedure Section 10 of D86.

D323 Vapor Pressure of Petroleum Products (Reid Method)

Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4 and 5 of D323.

B. Students will review each Procedure A, B, C, and D and determine what types of Petroleum Products apply to each Procedure.

C. Students will perform and follow each step of Procedure A, Section 12 of D323

#### D381 Existent Gum in Fuels by Jet Evaporation

##### Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D381.

B. Students will be able to recognize what petroleum products require an Air-Jet Apparatus and what products require a Steam-Jet Apparatus for Evaporation.

C. Students will perform and follow the step by step procedure Section 11 of D381.

#### Day 2

#### D525 Oxidation Stability of Gasoline

##### Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D525.

B. Students will review the detailed Apparatus Section 6 and Annex A1, compare each section to the actual equipment required, and demonstrate how each component fits together to compile a complete Oxidation Stability Apparatus for Fuels.

C. Students will perform and follow the step by step procedure Section 10 of D525.

#### D130 Detection of Copper Corrosion from Petroleum Products by Copper Strip Tarnish Test

##### Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D130.

B. Students will be able to recognize what petroleum products require a Pressure Vessel Apparatus and what products require a Test Tube Apparatus.

C. Students will perform and follow the step by step procedure Sections 10 and 11 for Preparation of Test Strips and Test Procedure.

#### D7667 Determination of Corrosiveness to Silver by Automotive Spark-Ignition Engine Fuel -Thin Silver Strip Method

##### Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D7667.

B. Students will be able to recognize what petroleum products require following Procedure A -Using a Pressure Vessel (PVP) and what products require following Procedure B - Using a Vented Test Tube (VTTP).

C. Students will perform and follow the step by step procedure Sections 10 and 11 for Preparation of Test Strips and Test Procedure.

#### D1319 Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption

##### Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D1319.

B. Students will review the detailed Apparatus Section 6 and compare each section to the actual equipment required, and demonstrate how each component fits together to compile a complete Fluorescent Indicator Adsorption Apparatus (FIA).

C. Students will perform and follow the step by step Procedure as per Section 10 of ASTM D1319.

#### Day 3

#### D93 Flash point by Pensky-Martens Closed Cup Tester

##### Learning Objectives:

A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D93.

B. Students will review the detailed Apparatus Section 6 for both manual and automated equipment compare each section to the actual equipment required, and determine what procedure A, B, or C is applicable to what product type, and what the key parameter differences are between each procedure.

C. Students will perform and follow the step by step Procedure A, B, C, (Section 11, 12,13) of D93.

#### D2500 Cloud Point of Petroleum Products

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D2500.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure Section 8 of D2500.

D97 Pour Point of Petroleum Products

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D97.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure Section 8 of D97.

D445 Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D445.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Sections 10 General and 11 for Transparent Liquids.

Day 4

D2709 Water and Sediment in Middle Distillate Fuels by Centrifuge

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D2709.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 8 of D2709.

D524 Ramsbottom Carbon Residue of Petroleum Products

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D524.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 9 of D524.

D6371 Cold Filter Plugging Point of Diesel and Heating Fuels

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D6371.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 12 of D6371.

D6079 Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR)

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D6079.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 11 and measuring the wear scar in Section 12.

D4294 Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 3, and 4 of D4294.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 12 of D4294.

Day 5

D298 Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D1298.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 10 of D1298.

D2386 Freezing Point of Aviation Fuels

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D1298.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 10 of D1298.

D2624 Electrical Conductivity of Aviation and Distillate Fuels

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D2624.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 11 of D2624.

D1322 Smoke Point of Kerosine and Aviation Turbine Fuel

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D1322.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure from Section 11.1 to 11.5.6 of D1322.

D3948 Determining Water Separation Characteristics of Aviation Turbine Fuels by Portable Separometer

Learning Objectives:

- A. Students will fully understand the scope, summary, significance and use as described in Sections 1, 4, and 5 of D3948.
- B. Students will review the detailed apparatus Section 6 and compare each section to the actual equipment required.
- C. Students will perform and follow the step by step procedure in Section 10 of D3948.

**ASTM Standards Referenced**

Test Methods

- D86 Distillation of Petroleum Products
- D93 Flash Point by Pensky-Martens Closed Cup Tester
- D97 Pour Point of Petroleum Products
- D130 Detection of Copper Corrosion from Petroleum Products by Copper Strip Tarnish Test
- D381 Existent Gum in Fuels by Jet Evaporation
- D445 Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)
- D524 Ramsbottom Carbon Residue of Petroleum Products
- D525 Oxidation Stability of Gasoline
- D975 Standard Specification for Diesel Fuel
- D1298 Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method
- D1319 Hydrocarbon Types in Liquid Petroleum Products by Fluorescent Indicator Adsorption
- D1322 Smoke Point of Kerosine and Aviation Turbine Fuel
- D1655 Standard Specification for Aviation Turbine Fuels
- D2500 Cloud Point of Petroleum Products
- D2624 Electrical Conductivity of Aviation and Distillate Fuels
- D2709 Water and Sediment in Middle Distillate Fuels by Centrifuge
- D3948 Determining Water Separation Characteristics of Aviation Turbine Fuels by Portable Separometer
- D4294 Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry

- D6079 Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR)
- D6371 Cold Filter Plugging Point of Diesel and Heating Fuels
- D7667 Determination of Corrosiveness to Silver by Automotive Spark-Ignition Engine Fuel - Thin Silver Strip Method

#### Manuals

- Significance of Tests for Petroleum Products

#### Fee Includes

- All referenced ASTM standards and course notes
- Transportation to and from tour site
- Coffee breaks
- Course Completion Certificate with 3.5 Continuing Education Units (CEUs)

#### About the Instructors

**Dr. Salvatore J. Rand** is an ASTM Fellow and a consultant in motor and aviation fuel technology. He is vice-chairman of ASTM Committee D-2 on Petroleum Products and Lubricants, former chairman of Subcommittee 5 on Properties of Fuels, and secretary of the section on Color and Reactivity. He is retired from the Fuels Research Division of Texaco's R&D Department. Rand received his B.S. degree in chemistry from Fordham University and his Ph.D degree in physical chemistry from Rensselaer Polytechnic Institute.

**David Forester** has over 40 years' experience in the fuel and refining additive business and has over 35 US patents on development of diesel and jet fuel additives, refinery antifoulants, and other refinery and process related additives. He has designed, implemented and/or automated many fuel test methods, including many ASTM standards that have resulted in new additive products, reformulations, and improvements to diesel fuel additive products. He has been a member of ASTM Committee D02 for over 20 years and currently serves as Chairman of Subcommittee D02.14 Stability and Cleanliness of Liquid Fuels which has jurisdiction for 48 ASTM standards, test methods, practices and guides. Mr. Forester has authored or co-authored multiple SAE and IASH papers/presentations, and co-authored Chapter 11 "Methods for Assessing Stability and Cleanliness of Liquid Fuels" in Significance of Tests for Petroleum Products" 8th Edition published 2010 by ASTM. He is currently functioning as associate editor of fuels for the 2nd edition revision to "The Fuels and Lubricant Handbook" published by ASTM.

**Dr. Raj Shah** currently holds the position of Director at Koehler Instrument Company, Long Island, NY where he has been working for the past two decades. He holds a Bachelor's degree in Chemical Engineering from the Institute of Chemical Technology (ICT) and a Ph. D in Chemical Engineering from The Pennsylvania State University and a MCP degree in Marketing and Management from Long Island University.

He is an active member of ASTM, STLE, NLGI, SAE, ACS, AOCS, SPE and AIChE and chairs various subcommittees in several of these organizations. He has over 100 publications and has co-edited an ASTM reference bestseller book "Fuels and Lubricant Handbook: Technology, Properties, Performance and Testing."

Dr. Shah is an elected Fellow of The Society of Tribologists and Lubrication Engineers (STLE) and was given the honor in 2016, in recognition for his outstanding contributions to the field of tribology. He is also the recipient of the Fellows award from NLGI since 2007, which endorsed his invaluable work in the field of greases. Raj is a Certified Professional Chemist and a Certified Chemical engineer with the National certification commission in chemistry and chemical engineering. He has also been awarded the Chartered Scientist status from the Science Council, UK and the Chartered Chemist status from the Royal society of chemistry.

Dr. Shah is an elected fellow of American Institute of Chemists and of the Energy Institute, UK. That fellowship was awarded to him in recognition of his professional experience and depth of knowledge and expertise that helped make a difference in the field of Energy. Raj is also a Chartered engineer with the Engineering Council, UK and was elected a Chartered Petroleum engineer with the Energy Institute in recognition of his specific expertise as a practitioner in energy engineering. Dr. Shah is a recent recipient of the PM Ku medal from STLE and the John A Bellanti Sr. Memorial award from NLGI, both prestigious recognitions for his volunteer work with the respective institutions over the years.



Raj has been particularly active in ASTM work, having served on the ASTM D02.9 committee for approximately 25 years. He was the vice-chair for the D02.G committee for over 12 years and served in leadership capacities in subcommittees D02.9 and D02.12. In recent years, Dr. Shah is a co-instructor for the ASTM hands-on Motor gasoline course, and the ASTM Fuel technology Course. Raj is a previous recipient of the ASTM Award of Excellence thrice in his career, and has also been lauded with the illustrious ASTM Eagle award.

Dr. Shah is an elected fellow of the Royal Society of Chemistry, which is typically awarded by one's peers to signify a scientist's high level of accomplishment. Dr. Shah is the only recipient of both the President's award and the Long service award from NLGI India and was honored in 2013 with the distinguished alumni award recipient from the Institute of Chemical Technology.

Raj volunteers his time to both professional and charitable organizations and has served on the Founders board of directors of Developmental Disabilities institute, a special needs school for autistic children in Long Island, and also served on the NLGI board of directors for over 15 years. Dr. Shah is involved in working closely with several universities and is currently on the advisory board at: The Department of Chemical Engineering: State University of New York, Stony Brook, The School of Engineering, Design, Technology and Professional programs (SEDTAPP): Pennsylvania State University, and the Samuel Ginn College of Engineering, Tribology and Lubrication science minor at Auburn University. Fluent in multiple languages, he enjoys world music, mixology, kayaking and mobile photography and lives in Melville, NY with his family.

**Vincent Colantuoni**, B.E, M.B.A, is the Product Manager for Koehler Instrument Company, Inc.

Koehler is a Manufacturer of Petroleum Testing Equipment with their major customer base being Petroleum Refineries, Inspection and Research Laboratories and other Major Universities and Institutions, where he has 10 years of experience in the Petroleum/Petrochemical Industry.

Vincent has been an active member of ASTM International, a worldwide standardization organization since 2008, in Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants. At ASTM International, he serves as the Secretary of Subcommittee 9, Section C on the Oxidation Testing of Turbine Oils. Within this section, Vincent is also the Technical Contact for ASTM test method D943 and is responsible for any changes being proposed or made to the method. Vincent also assumes administrative responsibilities in Subcommittee C for Turbine Oils and Subcommittee G on Lubricating Greases. In Subcommittee C, he is the Technical Contact for ASTM test methods D665 and D3605. In Subcommittee G, he is the Technical Contact for ASTM test methods D217 and D1403.

#### Education:

Master of Business Administration, M.B.A. Double Major in Management/Operations Management and Sustainable Business  
2015, Baruch College, City University of New York, N.Y.

Bachelors of Engineering, B.E. in Chemical Engineering  
Specialization in Business Management and Technology Transfer  
2007, Stony Brook University, Stony Brook, N.Y.

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#### ASTM Membership

Attend this course and receive a FREE 1-year membership to ASTM International and Committee D02 on Petroleum Products and Lubricants. (Applies to new members only and may not be used to renew existing memberships.)

#### Attention: Professional Engineers

If your state has a continuing education requirement for license renewal, ASTM training courses and ASTM membership can help you meet that requirement.

#### How Learning Will Be Assessed

JA04969

Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 31 of 45

Learning will be assessed through a series of questions and answer sessions.

**Questions About This Training Course**

For information on this training course, please contact [Training](#) or call (610) 832-9686.

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# EXHIBIT 6

## Crude Oil: Sampling, Testing, and Evaluation



Price: \$1,550.00

### Register Online:

In order to register, please enter the number of attendees in the appropriate box below and click add attendees.

### San Antonio, TX

11/4/2019 - 11/6/2019

Holiday Inn  
San Antonio Riverwalk  
217 N. St. Mary's Street  
San Antonio, TX 78205

210-224-2500

Number of Attendees

ADD ATTENDEES

### Early Bird Discount

ASTM automatically applies a discount of 10% when participants register 60 days prior to the start of the class.

***\*After the early bird period expires, registrations are subject to standard pricing.***

### About the Course

This extensive 3-day class covers the sampling, analysis and evaluation of crude oil. You'll gain an understanding of crude oil analytical measurement, composition and classification; quality variations and what causes them; sampling (both manual and automatic); inspection, assays and test methods; basic crude oil evaluation; quality case studies; current challenges and future needs in characterization, and much more.

### Learning Outcomes

By the end of this course you will be able to:

- Discuss the history of crude oil as it relates to supply and training patterns
- Define and discuss key terminology
- Discuss sample protocols
- Review and discuss case studies.

### Who Should Attend

- Laboratory technicians and chemists responsible for the analysis of crude oil samples for quantity and quality purposes
- Laboratory technicians and chemists responsible for the analysis of crude oil samples for quantity and quality purposes
- Refinery personnel responsible for evaluating crude oil to determine their processing characteristics
- Operating (field) personnel responsible for collecting samples will also benefit from a better understanding of how test results are directly dependent on proper sample collection and handling
- Traders and buyers involved in sale, purchase, or exchanges of crude oil.

### Course Description

Registration 8:00-8:30 AM

Class 8:30 AM to 4:30 PM each day

### Day 1

- Crude Oil History; Supply and Trading Patterns
- Definitions and Terms
- Quality Variations and Their Causes
- The Complexities of Crude Oil Composition
- Sampling Protocols

**Day 2**

- Composition and Classification
- Inspection Analyses (Cursory Assay)
- Comprehensive Analyses (Full Assay)
- Other Important Crude Oils and Fraction Properties
- Basics of Crude Oil Processing Evaluation
- Break Out Group Exercises

**Day 3**

- Bituminum and Extra Heavy Crude Oils
- Crude Oil Quality Case Studies
- ASTM Crude Oil Proficiency Testing Program
- Challenges Presented to the Analyst by Heavier, Higher Sulfur Feedstocks and Opportunity Crude Oils
- Future Needs in Crude Oil Characterization and Analytical Test Method Requirements

**Referenced Documents**

- D97 Pour Point of Petroleum Products
- D287 API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)
- D323 Vapor Pressure of Petroleum Products (Reid Method)
- D445 Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)
- D473 Sediment in Crude Oils and Fuel Oils by the Extraction Method
- D664 Acid Number of Petroleum Products by Potentiometric Method
- D1298 Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method
- D2622 Sulfur in Petroleum Products by X-ray Spectrometry
- D2892 Standard Test Method for Distillation of Crude Petroleum (15-Theoretical Plate Column)
- D3230 Salts in Crude Oil (Electrometric Method)
- D3700 Standard Practice for Obtaining LPG Samples Using a Floating Piston Cylinder
- D4006 Water in Crude Oil by Distillation
- D4007 Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)
- D4057 Manual Sampling of Petroleum and Petroleum Products
- D4177 Automatic Sampling of Petroleum and Petroleum Products
- D4294 Sulfur in Petroleum Products by Energy-Dispersive X-ray Fluorescence Spectrometry
- D4377 Water in Crude Oil by Potentiometric Karl Fischer Titration
- D4530 Determination of Carbon Residue (Micro Method)
- D4629 Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence
- D4807 Sediment in Crude Oil by Membrane Filtration

**Fee Includes**

- Course notes
- Referenced documents
- Certificate Of Attendance
- 2.1 CEUs (Continuing Education Units)
- Coffee breaks

**About the Instructors**

**Harry Giles** is retired from the U. S. Department of Energy where he was manager of crude oil quality programs for the Strategic Petroleum Reserve. He was employed by the DoE for over 30 years, prior to which he held several positions with other U.S. government agencies and the University of Manchester in the United Kingdom. He has authored or co-authored a number of articles on crude oil analysis, characterization, storage, and on fuel stability and cleanliness. Giles is a technical advisor to ASTM for their Crude Oil Interlaboratory Crosscheck Program (ILCP). Currently, he is Executive Director of the Crude Oil Quality Association.

**Dr. Arden Strycker** has over 30 years experience in the petroleum industry including both advanced oil production technologies and downstream analytical testing and analyses. He has worked at the National Institute of Petroleum & Energy Research developing

enhancements for production in the US. He did research in the 1980's and 1990's. Since then, his career shifted to crude oil assays and ASTM analytical testing of crude oil properties. For over 10 years at Northrop Grumman the laboratory provided to the Department of Energy's Strategic Petroleum Reserve (SPR) numerous inspection and comprehensive assays of domestic and foreign crude oil streams and the up to 700 million barrels of crude oil stored underground in salt caverns. Specialized assay software was utilized as part of the program to generate customized assays of cavern blends. These were used successfully by the SPR in sales of the crude oil. More recently Dr. Strycker has led the Crude Assay Department of SGS North America at Deer Park, TX. Crude assays, custom distillations, and custom testing are provided to clients around the world, with strong emphasis on North and South America crude oils. Arden received his B.S. in chemistry from Southern Oregon University, and his Ph.D. in organic chemistry from Oregon State University.

#### About Sponsoring Committee

Organized in 1898, ASTM is one of the world's largest voluntary standards development organizations. ASTM standards have grown to be among the world's most widely used and accepted documents. The 82-volume *Annual Book of ASTM Standards* contain 12,000 standards written by 34,000 members on our 140 technical committees. Committee D02 on Petroleum Products, Liquid Fuels, and Lubricants developed the standards used in this course. For more information, contact [Alyson Fick](#) at (610) 832-9710 or go to our [D02](#) technical committee page.

#### ASTM Membership

Attend this course and receive a FREE 1-year membership to ASTM International and Committee D02 on Petroleum Products and Lubricants. (Applies to new members only and may not be used to renew existing memberships.)

#### Attention: Professional Engineers

If your state has a continuing education requirement for license renewal, ASTM training courses and ASTM membership can help you meet that requirement.

#### On-Site Training Available

ASTM can bring this course to your site! On-site training courses can also be tailored to meet your specific needs. For more information, please contact sales [here](#) or call 1-877-909-ASTM.

#### How Learning Will Be Assessed

Learning will be assessed through a series of question and answer sessions.

#### Questions About This Training Course

For information on this training course, please contact [Training](#) or call (610) 832-9695.

#### Attendee Praise

Praise from recent attendees of the course:

*"Very well balanced to meet the needs of a diverse audience."*

*"These courses are promoted by my company as a way to continue education. I always learn something new from them and they definitely add to personal enrichment."*

*I really enjoyed the course and was glad that I was taught by Mr. Giles."*

*All topics were applicable to what I needed to know."*

*"The wide scope of the course was helpful."*

*"Very much enjoyed the presentation and the knowledge of Harry Giles. Also appreciated the diversity of the group. Helped me understand more/different facets of our industry."*

*"Increased my understanding; answered outstanding questions."*

#### Related Courses

You may also be interested in these related courses:

[Live Courses](#)

Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 36 of 45

- [EPA Tier III SO<sub>x</sub> Readiness Requirements](#)
- [Statistics in ASTM Standard Test Method Development, Application, and Quality Assurance](#)

Online Courses

- [ASTM Petroleum Lab Technician Series](#)

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# EXHIBIT 7



#2 Diesel Fuel Training -- E-Learning  
Bundle

Price: \$2192

**About the Series**

ASTM's **Petroleum Lab Technician Series** enables lab technicians to improve their skills through industry leading, self-guided, online training. The e-learning courses are a key tool to supplement existing internal lab QA/QC programs.

Each course includes:

- Self-guided training complete with video demonstrations, checklists, concept presentations, data sheets and glossaries
- Quiz with automatic grading
- Certificate upon successful completion of course and passing score on the quiz.

**ASTM E-Learning Center**

All ASTM online courses are available by subscription on ASTM's E-Learning Center. The E-Learning Center provides advanced features that let you set up learning plans, track learning progress and compliance, and run reports.

**#2 Diesel Fuel Bundle**

The #2 Diesel Fuel e-learning bundle includes all of the following courses. Courses are also available individually. Each course can be completed in about one hour.

- [D86 Distillation](#)
- [D93 Flash Point](#)
- [D97 Pour Point](#)
- [D130 Copper Corrosion](#)
- [D189 Carbon Residue](#)
- [D445 Viscosity, Kinematic](#)
- [D482 Ash](#)
- [D524 Carbon Residue](#)
- [D664 Acid Number](#)
- [D974 Acid Number](#)
- [D1298 Density](#)
- [D1319 Hydrocarbon Type](#)
- [D2500 Cloud Point](#)
- [D2622 Sulfur Content](#)
- [D2624 Electrical Conductivity](#)
- [D4052 Density, Relative Density](#)
- [D4294 Sulfur Content](#)
- [D4530 Carbon Residue](#)
- [D4629 Nitrogen](#)
- [D5453 Sulfur Content](#)
- [D5762 Nitrogen](#)
- [D6079 Lubricity](#)
- [D6468 High Temperature](#)
- [D7688 Lubricity \(HFRR\)](#)

**CEUs and Certificate**

CEUs: Available for all courses. Please see individual course listing for more information.

Certificates: A certificate is available upon successful completion of the course and an 80% or higher score on the exam.

**Preview a Course**

To preview a demo version of a course, click [here](#).

**Access**

1 year online subscription for a Single User Only via username/password. Requires internet access.

For pricing for Multi-User access or for more information, please contact sales [here](#) or call 1-877-909-ASTM.

**Technology Requirements**

Case 1:13-cv-01215-TGC Document 198-49 Filed 10/07/19 Page 39 of 45

For a list of technical requirements to access ASTM Training please click [here](#).

Price: \$2192

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# EXHIBIT 8

Price: \$2825

#### About the Series

ASTM's **Petroleum Lab Technician Series** enables lab technicians to improve their skills through industry-leading, self-guided online training. The e-learning courses are a key tool to supplement existing internal lab QA/QC programs.

Each course includes:

- Self-guided training complete with video demonstrations, checklists, concept presentations, data sheets and glossaries
- Quiz with automatic grading
- Certificate upon successful completion of course and passing score on the quiz.

#### ASTM E-Learning Center

All ASTM online courses are available by subscription on ASTM's E-Learning Center. The E-Learning Center provides advanced features that let you set up learning plans, track learning progress and compliance, and run reports.

#### Other Petroleum Courses

The Other Petroleum Course package includes all of the following courses. Courses are also available individually.

- [Aviation Fuel Quality Control Procedures Training Bundle](#)
- [Aviation Fuel - Quality Control Procedures: An Overview](#)
- [General Fuel Handling](#)
- [Particulate Detection](#)
- [Water Detection](#)
- [Filtration Equipment](#)
- [Microbial Contamination Detection](#)
- [Flash Point: Sampling and Test Specimens](#)
- [Flash Point: Preparation, Verification and Maintenance of Apparatus](#)
- [Flash Point: Explanation and Terminology](#)
- [Flash Point: Apparatus and Auxiliary Equipment](#)
- [Flash Point Bundle: Includes all 4 Flash Point courses listed above](#)
- [D611 Aniline Point](#)
- [D4308 Electrical Conductivity](#)
- [D4860 Water and Sediment Content](#)
- [D6426 Filterability](#)
- [D6824 Filterability](#)
- [D7261 Water Separation](#)

#### Preview A Course

To preview a demo version of a course, click [here](#).

#### Access

1 year online subscription for a Single-User Only via username/password. Requires internet access.


For pricing for Multi-User access or for more information, please contact sales [here](#) or call 1-877-909-ASTM.

#### Technology Requirements

1 year online subscription for a Single-User Only via username/password. Requires internet access.

For pricing for Multi-User access or for more information, please contact sales [here](#) or call 1-877-909-ASTM.

Price: \$2825

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Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 42 of 45

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# EXHIBIT 9

## ASTM E23 Standard Test Methods for Notched Bar Impact Testing of Metallic Materials -- E-Learning Course

Price: \$125.00

### About the Series

ASTM's **Mechanical Engineering Technician Series** enables lab technicians to improve their skills through industry-leading, self-guided online training. The training courses are a key tool to supplement existing internal lab QA/QC programs.

Each course includes:

- Self-guided training complete with video demonstrations, checklists, concept presentations, data sheets and glossaries
- Review quiz with automatic grading
- Certificate upon successful completion of training module

### ASTM E-Learning Center

All ASTM online courses are available by subscription on ASTM's E-Learning Center. The E-Learning Center provides advanced features that let you set up learning plans, track learning progress and compliance, and run reports.

### About the Course

This course covers the test methods that describe notched-bar impact testing of metallic materials by the Charpy (simple-beam) test and the Izod (cantilever-beam) test. The course covers the requirements for: test specimens, test procedures, test reports, test machines verifying Charpy impact machines, optional test specimen configurations, designation of test specimen orientation, and determining the percent of shear fracture on the surface of broken impact specimens.

In addition, information is provided on the significance of notched-bar impact testing, and methods of measuring the center of strike.

### Learning Outcomes

By the end of this course you will be able to:

- Determine the impact strength of a metal
- Predict the likelihood of brittle fracture accurately
- Explain the Charpy and Izod test approaches
- Summarize the procedural steps required to determine the absorbed energy of metallic materials by notched bar impact testing

### Audience

Anyone who runs the E23 test method or who needs an understanding of the test method and how it is properly run.

### Course Content

- Introduction
- Demonstration Videos
- Procedural Outlines
- Glossary
- Data Sheet
- Quiz
- Referenced Materials
- Certificate

### Videos

- Preparation of Apparatus (Duration: 4:11)
- Test Temperature Considerations (Duration: 5:04)
- Charpy Test Procedure (Duration: 4:25)

### CEUs and Certificate

CEUs: .1 or 1 PDH

Certificate: A certificate is available upon successful completion of the course and an 80% or higher score on the exam.

### Reference Materials Included

Case 1:13-cv-01215-TSC Document 198-49 Filed 10/07/19 Page 45 of 45

**Access**

1 year online subscription for a Single-User Only via username/password. Requires internet access.

For pricing for Multi-User access or for more information, please contact sales [here](#) or call 1-877-909-ASTM.

**Technology Requirements**

For a list of technology requirements for accessing ASTM Training please click [here](#).

**Stock #**

TRAIN-E0023-PASS

Price: \$125

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**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: right;">Plaintiffs/ Counter-Defendants,</p> <p>v.</p> <p>PUBLIC.RESOURCE.ORG, INC.,</p> <p style="text-align: right;">Defendant/ Counter-Plaintiff.</p>	<p style="text-align: center;">Case No. 1:13-cv-01215-TSC</p>
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**SUPPLEMENTAL DECLARATION OF JAMES T. PAULEY  
IN SUPPORT OF PLAINTIFFS' SECOND MOTION FOR SUMMARY JUDGMENT  
AND A PERMANENT INJUNCTION**

I, James T. Pauley, declare as follows:

1. I am the President and Chief Executive Officer of the National Fire Protection Association (“NFPA”) and have been since July 1, 2014. I am generally responsible for the management, direction and administration of NFPA and its activities, including NFPA’s standards development activities. The following facts are based upon my own personal knowledge, and if called upon to do so, I could and would testify competently thereto.

2. I previously submitted a declaration in November 2015, in support of Plaintiffs’ Motion for Summary Judgment (Dkt. 118-8). That declaration provided background regarding NFPA, its standards development process and standards, and the importance of copyright to its

ability to serve its overall mission. I submit this declaration to provide additional testimony in support of Plaintiffs’ Second Motion for Summary Judgement and a Permanent Injunction.

**NFPA Owns Copyrights in Its Standards**

3. NFPA owns the copyrights to over 300 standards it has published. This litigation involves 23 of NFPA’s copyrighted standards.

4. True and correct copies of the following NFPA standards are attached as exhibits hereto<sup>1</sup> and filed under seal so they cannot be copied and distributed:

<b>Designation</b>	<b>Edition</b>	<b>Title</b>	<b>Exhibit</b>
NFPA 1	2003	Uniform Fire Code	A
NFPA 1	2006	Uniform Fire Code	B
NFPA 10	2002	Standard for Portable Fire Extinguishers	C
NFPA 11	2005	Standard for Low Medium and High Expansion Foam	D
NFPA 12	2005	Standard on Carbon Dioxide Extinguishing Systems	E
NFPA 13	2002	Installation of Sprinkler Systems	F
NFPA 25	2002	Inspection, Testing and Maintenance of Water-Based Fire Protection Systems	G
NFPA 30	2003	Flammable and Combustible Liquids Code	H
NFPA 54	2006	National Fuel Gas Code	I
NFPA 58	2001	Liquefied Petroleum Gas Code	J
NFPA 58	2004	Liquefied Petroleum Gas Code	K
NFPA 59	2004	Utility LP Gas Plant Code	L
NFPA 70	1999	National Electrical Code	M
NFPA 70	2005	National Electrical Code	N
NFPA 70	2008	National Electrical Code	O
NFPA 70	2014	National Electrical Code	P
NFPA 72	2002	National Fire Alarm Code	Q
NFPA 99	2005	Health Care Facilities Code	R
NFPA 101	2000	Life Safety Code	S
NFPA 101	2003	Life Safety Code	T
NFPA 101	2006	Life Safety Code	U
NFPA 704	2007	Standard System for the Identification of the Hazards of Materials for Emergency Response	V

<sup>1</sup> NFPA previously filed a true and correct copy of NFPA 70 (2011 ed.), the National Electrical Code (“NEC”), as Exhibit A to the declaration of Christian Dubay, Dkts. 155-6 (redacted); 154-2 (motion to seal), 162 (sealed).

5. NFPA previously submitted the copyright registration certificates for NFPA 70, the National Electrical Code (2011 ed.) and (2014 ed.), as Exhibits A & B to the declaration of Dennis Berry (Dkt. 118-3). Copyright registration certificates for NFPA's other standards at issue in this litigation are attached hereto as set forth below.

6. NFPA owns a United States copyright registration for NFPA 1 (2003 ed.), the Uniform Fire Code. Attached as Exhibit W to this declaration is a true and correct copy of the registration certificate for this work, TX 5-970-602.

7. NFPA owns a United States copyright registration for NFPA 1 (2006 ed.), the Uniform Fire Code. Attached as Exhibit X to this declaration is a true and correct copy of the registration certificate for this work, TX 6-261-668.

8. NFPA owns a United States copyright registration for NFPA 10 (2002 ed.) the Standard for Portable Fire Extinguishers, NFPA 13 (2002 ed.) Installation of Sprinkler Systems, NFPA 25 (2002 ed.) Inspection, Testing and Maintenance of Water-Based Fire Protection Systems, registered under the title "National Fire Codes Vol. 1-12 and Master Index." Attached as Exhibit Y to this declaration is a true and correct copy of the registration certificate for this work, TX 5-752-623.

9. NFPA owns a United States copyright registration for NFPA 11 (2005 ed.) the Standard for Low Medium and High Expansion Foam. Attached as Exhibit Z to this declaration is a true and correct copy of the registration certificate for this work, TX 6-160-768.

10. NFPA owns a United States copyright registration for NFPA 12 (2005 ed.) the Standard on Carbon Dioxide Extinguishing Systems. Attached as Exhibit AA to this declaration is a true and correct copy of the registration certificate for this work, TX 6-232-876.

11. NFPA owns a United States copyright registration for NFPA 30 (2003 ed.) Flammable and Combustible Liquids Code. Attached as Exhibit BB to this declaration is a true and correct copy of the registration certificate for this work, TX 5-905-038.

12. NFPA owns a United States copyright registration for NFPA 54 (2006 ed.) National Fuel Gas Code. Attached as Exhibit CC to this declaration is a true and correct copy of the registration certificate for this work, TX 6-261-666.

13. NFPA owns a United States copyright registration for NFPA 58 (2001 ed.) Liquefied Petroleum Gas Code (title registered as “National Fire Codes Vol 3”). Attached as Exhibit DD to this declaration is a true and correct copy of the registration certificate for this work, TX 5-401-672.

14. NFPA owns a United States copyright registration for NFPA 58 (2004 ed.) Liquefied Petroleum Gas Code. Attached as Exhibit EE to this declaration is a true and correct copy of the registration certificate for this work, TX 5-956-112.

15. NFPA owns a United States copyright registration for NFPA 59 (2004 ed.) Utility LP Gas Plant Code. Attached as Exhibit FF to this declaration is a true and correct copy of the registration certificate for this work, TX 5-953-205.

16. NFPA owns a United States copyright registration for NFPA 70 (1999 ed.) National Electrical Code. Attached as Exhibit GG to this declaration is a true and correct copy of the registration certificate for this work, TX 4-092-419.

17. NFPA owns a United States copyright registration for NFPA 70 (2005 ed.) National Electrical Code. Attached as Exhibit HH to this declaration is a true and correct copy of the registration certificate for this work, TX 6-108-410.

18. NFPA owns a United States copyright registration for NFPA 70 (2008 ed.) National Electrical Code. Attached as Exhibit II to this declaration is a true and correct copy of the registration certificate for this work, TX 6-966-113.

19. NFPA owns a United States copyright registration for NFPA 72 (2002 ed.) National Fire Alarm Code. Attached as Exhibit JJ to this declaration is a true and correct copy of the registration certificate for this work, TX 5-841-133.

20. NFPA owns a United States copyright registration for NFPA 99 (2005 ed.) Health Care Facilities Code. Attached as Exhibit KK to this declaration is a true and correct copy of the registration certificate for this work, TX 6-153-939.

21. NFPA owns a United States copyright registration for NFPA 101 (2000 ed.) Life Safety Code. Attached as Exhibit LL to this declaration is a true and correct copy of the registration certificate for this work, TX 5-371-918.

22. NFPA owns a United States copyright registration for NFPA 101 (2003 ed.) Life Safety Code. Attached as Exhibit MM to this declaration is a true and correct copy of the registration certificate for this work, TX 5-841-134.

23. NFPA owns a United States copyright registration for NFPA 101 (2006 ed.) Life Safety Code. Attached as Exhibit NN to this declaration is a true and correct copy of the registration certificate for this work, TX 6-294-334.

24. NFPA owns a United States copyright registration for NFPA 704 (2007 ed.) Standard System for the Identification of the Hazards of Materials for Emergency Response. Attached as Exhibit OO to this declaration is a true and correct copy of the registration certificate for this work, TX 6-445-855.

**Incorporation by Reference of NFPA's Standards**

25. Federal agencies, states, and local governments sometimes incorporate NFPA's standards (or portions thereof) by reference into their regulations, statutes, or ordinances. Such entities frequently set forth their own amendments or modifications that are specific to their respective jurisdictions. We refer to an entity (usually a governmental body) that enforces a standard as an Authority Having Jurisdiction ("AHJ"). It is the incorporating entity of agency or the relevant AHJ, not NFPA, that decides which legal duties will apply, to whom those duties will apply, and the procedures and policies relating to enforcement, within the entity's or the AHJ's jurisdiction.

26. The NFPA standards at issue in this litigation provide that there may be *other ways*, in addition to those set out within a published standard, for persons within a jurisdiction to satisfy their particular legal obligations. For example, NFPA 54, 2006 ed., the National Fuel Gas Code, states that its provisions "are not intended to prevent the use of any material, method of construction, or installation procedure not specifically prescribed by this code, provided any such alternative is acceptable to the authority having jurisdiction." Ex. I at ch. 1.4 "Equivalency" (NFPA-PR0014798). I am aware that substantively similar provisions appear in each of the other standards at issue.

27. Although AHJs or other entities may incorporate our standards by reference, portions within each of our standards provide options or examples. As explained in, for example, the 2014 NEC (NFPA 70), the standards include "Permissive Rules" which are defined as "those that identify actions that are allowed but not required, are normally used to describe options or alternative methods, and are characterized by the use of the terms *shall be permitted* or *shall not be required*." Ex. P at art. 90-5(B) (NFPA-PR0098088). An example of such an optional rule is article 324.56(A) of the 2014 NEC regarding FCC Systems Alterations, which

states “Alterations to FCC systems shall be permitted. . . . It shall be permitted to leave unused cable runs and associated cable connectors in place and energized.” *Id.* at art. 324.56(A) (NFPA-PR0098260).

28. Further, all of NFPA’s standards include text that does not set forth any obligation. I describe these sections below.

- a. **Prefatory Notices:** NFPA’s standards generally include a section setting forth notices, including information regarding the voluntary consensus standards development process, and disclaimers and copyright information, regarding the publication.
- b. **History, Development and Edition Information:** NFPA’s standards generally include introductory and background information about, for example, the origin of the standards and its purpose, relation to other standards, and edition-specific information.
- c. **Reference and Informational Notes:** NFPA’s standards often include in-line informational notes throughout the text of each standard. The informational notes provide context, background, cross-references, and other explanatory material. For some of our standards, the text explicitly qualifies the informational notes as “not enforceable as requirements.” For example, article 90-5(C) of the 2014 NEC (NFPA 70) provides: “Explanatory material, such as references to other standards, references to relates sections of this *Code*, or information related to a *Code* rule, is included in this *Code* in the form of informational notes.” Ex. P at art. 90-5(C) (NFPA-PR0098088). As the NEC makes clear: “such notes are *informational only and are no enforceable as requirements of this Code.*” *Id.*

(emphasis added). An example of the type of material written in informational notes is art. 110-11, Informational Note No. 2, of the same publication: “Some cleaning and lubricating compounds can cause severe deterioration of many plastic materials used for insulating and structural applications in equipment.” *Id.* at art. 110-11 n.2 (NFPA-PR0098100). Someone could paraphrase or use their own words to describe this same information, rather than copying NFPA’s words.

- d. **Diagrams, Figures, and Illustrations:** NFPA’s standards generally include diagrams, figures, or illustrations that depict material set forth in the text of the standard, but that do not themselves state any legal duty. For example, in the 2014 NEC, Figure 220.1 provides a graphical summary of how the text of Article 220 is organized. Ex. P at Figure 220.1 (NFPA-PR0098129). If someone wanted to write their own description of the organizational structure of Article 220, that person could do so using different words or different illustrations than the one NFPA created.
- e. **Examples:** NFPA’s standards generally include non-exhaustive lists or exemplary calculations. For example, in the 2014 NEC, article 550.4(A) lists examples of a mobile home not intended as a dwelling unit: “those equipped for sleeping purposes only, contractor’s on-site offices, construction job dormitories, mobile studio dressing rooms, banks, clinics, mobile stores, or intended for the display or demonstration of merchandise or machinery.” *Id.* at art. 550.4(A) (NFPA-PR0098568). These illustrative examples do not impose any requirement. If someone wanted to create their own list of examples of a mobile home that is not intended as a dwelling unit, that person could come up with their own



examples, could use different words to describe even the examples that NFPA provides, and could list their examples in a different order.

- f. **Informational Annexes:** All of the standards in this litigation, and our standards generally, include informational annexes. These informational annexes typically provide that they are *informational only*, although they can contain a variety of material. For example, Annex A to NFPA 13 (2002 ed.), Installation of Sprinkler Systems, is entitled “Explanatory Material,” which states “Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material numbered to correspond with the applicable text paragraphs.” Ex. F at Annex A (NFPA-PR0014507). Some informational annexes contain standards that may be binding, but only if an AHJ specifically incorporates the informational annex by reference. For example, Annex H to NFPA 70 (2014 ed.), the National Electrical Code, is entitled “Administration and Enforcement.” That annex specifically states that it is “not a part of the requirements of this NFPA document and is included for informational purposes only . . . unless specifically adopted by the local jurisdiction adopting the National Electrical Code®.” Ex. P at Annex H (NFPA-PR0098919).
- g. **Proposal Forms:** Our standards generally include information about the committee process and proposal forms so the reader can submit suggested language for future editions.

29. The non-binding materials I have described in the preceding paragraph serves NFPA’s overall goal of public safety by providing the ultimate user of the standard—whether an

engineer, contractor, architect, or anyone else—with additional references or material related to the subject of the standard.

**PRO's Continues to Copy and Distribute NFPA's Standards and Use NFPA's Trademarks and Logo**

30. I am aware that Public.Resource.Org has copied and published NFPA's 2017 National Electrical Code to the Internet Archive website.

31. In addition, I am aware that after the D.C. Circuit remand, Public.Resource.Org re-posted NFPA's standards to the Internet Archive website. Those versions have received many more views and downloads since they were reposted. Anyone can freely download, copy, print and redistribute these versions of NFPA's standards from the Internet Archive website.

32. I understand that Public.Resource.Org has represented that it has removed all of the Plaintiffs' logos from the versions of the standards it posts to the Internet Archive website. PRO has not removed the trademarked logo for the National Electrical Code. *See Berry Decl.* ¶¶ 8-9, Exs. H, I (trademarks for NFPA 70 and NEC logo).

**PRO Interferes with NFPA's Actual and Potential Market for Its Standards**

33. NFPA depends on the sale of standards to fuel its overall mission-driven work. In 2018, NFPA's publication sales accounted for approximately 64% of NFPA's total operating revenues. The vast majority of that revenue is from the sale of codes and standards, including those standards that have been incorporated by reference.

34. NFPA's standards are purchased and used predominantly by industry professionals and tradespeople (either individually or by their companies and organizations) who use these standards in the course of their business, such as contractors, engineers, electricians, architects, and electrical equipment manufacturers.

35. The versions of our standards posted by Public.Resource.Org and available for unrestricted download and use compete directly with our standards in the market. If the professionals and tradespeople are able to access and download nearly-identical standards without incurring any cost through Public.Resource.Org's postings to the Internet Archive, they will not buy our publications (or use our free access website, as I discuss more below). This hurts our revenue and, in turn, ability to pursue our overall mission.

36. NFPA also earns significant revenue from licensing its standards to other companies and organizations to use in their products and services, for example, derivative works like checklists based on the standards. Pursuant to those licenses, NFPA provides licensees with copies of its standards or portions thereof in formats that the licensee may use in conjunction with software or other forms of dissemination. NFPA's licenses likely would lose significant value if the licensees or their customers could obtain the same material from Public.Resource.Org in digital format, without cost, and without restrictions on further dissemination.

37. Public.Resource.Org's postings threaten NFPA's ability to control the further dissemination and use of its standards. Because Public.Resource.Org offers unrestricted and anonymous access to NFPA's standards in multiple formats (unlike NFPA's free access), NFPA has absolutely no means of tracking down those individuals who use Public.Resource.Org's versions of NFPA's standards for their commercial businesses, or for sale to other individuals and entities.

38. Although our revenue is somewhat cyclical with our publications (higher when new publications are released), in recent years, NFPA's revenue from the sale of standards has been declining. We attribute this decline, at least in part, to Public.Resource.Org's making

copies of NFPA’s standards widely available, including for use by those same industry professionals who would otherwise purchase copies or digital subscription access.

**Public.Resource.Org’s Postings Contain Errors**

39. I understand that Public.Resource.Org converted NFPA standards to different formats and posted those versions on the internet. The conversion process inevitably resulted in errors. For example, I am aware that the full text version of the 2011 version of the NEC that was posted to Public.Resource.Org’s website contains many errors.<sup>2</sup> These include many obvious typographical errors, but they also include errors that distort the meaning of the standard. Some of those errors are:

- a. Article 310.10(F) of the 2011 NEC addresses conductors used in direct-burial applications, and states: “Cables rated above 2000 volts shall be shielded.” This requirement that high-voltage cables in direct-burial applications be shielded is important to prevent damage to the cables and a resulting risk of electrical shock. This language, however, is completely omitted from the full text version that was posted on Public.Resource.Org’s website.
- b. Article 424.59 of the 2011 NEC states that “heaters installed within 1.2m (4 ft) of the outlet of an air-moving device . . . may require turning vanes, pressure plates, or other devices on the inlet side of the duct heater to ensure an even distribution of air over the face of the heater.” In Public.Resource.Org’s full text version however, the “m”—representing meters—is incorrectly rendered as “in”—which represents inches. In other words, the Public.Resource.Org version says that the

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<sup>2</sup> Public.Resource.Org makes this version available at <https://archive.org/details/gov.law.nfpa.nec.2011>.

requirement is only triggered if a heater is less than 1.2 inches from an air-moving device, rather than the correct and much greater distance of 1.2 meters.

- c. Article 430.35(B) of the 2011 NEC states that “motor overload protection shall not be shunted or cut out during the *starting* period if the motor is automatically started” (emphasis added). Inadequate motor overload protection can result in overheating and damage. In Public.Resource.Org’s full text version, however, this provision incorrectly says that motor overload protection shall not be shunted or cut out during the “*stalling* period” (emphasis added).<sup>3</sup>
- d. There are many typographical errors in the cross-references in Public.Resource.Org’s full text version. In order to understand a provision of the NEC that contains a cross-reference, the user must be able to identify and refer to the Article identified in that cross-reference. However, Public.Resource.Org’s full text version contains many erroneous cross-references including in Articles 310.10(E), 410.140(D), 430.75, 504.70, 645.10(B), 670.3(B), 680.25(B).

#### **NFPA Provides Free Access to the Standards**

40. Since 2006, NFPA has offered a dedicated website that provides free access to its standards. It has been and remains committed to providing the full text of NFPA standards that have been incorporated by reference available, without cost, for viewing on its website.

41. Each of the 23 standards at issue in this litigation is available through a link, and after logging into that individual’s account, on our free access website, available at <https://www.nfpa.org/Codes-and-Standards/All-Codes-and-Standards/Free-access>.

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<sup>3</sup> [https://archive.org/stream/gov.law.nfpa.nec.2011/nfpa.nec.2011\\_djvu.txt](https://archive.org/stream/gov.law.nfpa.nec.2011/nfpa.nec.2011_djvu.txt) (the incorrect language also appears out of order under section 430.42 in the full text version).

42. This access ensures that if someone does not have ready access to a printed copy of a particular standard, that person can locate and read the material that is of interest to them.<sup>4</sup> Thousands of individuals access NFPA's standards through the free access website each year. This access is "read only," meaning that someone viewing the material online cannot download, copy, or disseminate the published standard.

43. We believe that our read only access appropriately balances our rights and our need to generate revenue to pursue our mission with the desire of others to read the codes and standards. We also believe that it is efficient to spread the cost of the standards development activity across the world of professionals who use our standards to do their jobs such that any one is paying a reasonable cost (around \$100 or less) for a copy of one of our standards. I created a video regarding this balance which is available on our website at <https://www.nfpa.org/Codes-and-Standards/All-Codes-and-Standards/Free-access>.

44. When NFPA becomes aware of jurisdictions that incorporate its standards by reference, NFPA encourages those jurisdictions to link their websites to NFPA's free, online version of the standards. NFPA provides a "Free Access Widget" that easily enables such access.

45. NFPA views this free access as in furtherance of its overall mission. Read only access allows any member of the public wishing to know what an incorporated standard says on any topic that may be of interest to that member of the public. NFPA's free access also encourages increased visits to NFPA's website. Users who visit NFPA's website may engage with NFPA on public-safety awareness efforts, trainings, and publications. NFPA hopes that

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<sup>4</sup> NFPA makes other accommodations available for visually impaired individuals who can either contact NFPA directly, or use NFPA's standards in accessible format through the National Library System's access for visually impaired individuals.

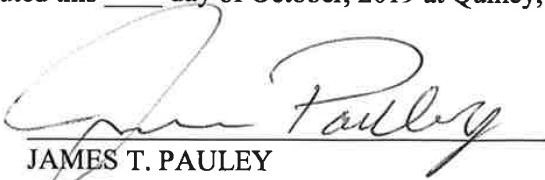
these individuals may someday become members, contributors, and otherwise involved in NFPA's important work.

**NFPA's CodeFinder™ and Other Informational Resources**

46. NFPA has also devoted resources to researching and consolidating information regarding which jurisdictions have incorporated NFPA standards into local, state, or federal laws or regulations. This information is provided as an informational and educational resource so the public can know which NFPA standards govern in particular jurisdictions.

47. NFPA offers two dedicated websites with this information: The NEC Adoptions Map, <https://www.nfpa.org/NEC/NEC-adoption-and-use/NEC-adoption-maps>, and CodeFinder™ <https://codefinder.nfpa.org>. As NFPA explains to the public when they use the CodeFinder™ tool: "Publication of this tool is for the sole purpose of creating general public awareness of some of the jurisdictions where [AHJs] may require the use of NFPA codes and/or standards."

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 \_\_\_\_ day of October, 2019 at Quincy, Massachusetts.



JAMES T. PAULEY





Case 1:13-cv-01215-TSC Document 200 Filed 10/07/19 Page 1 of 57

**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>
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**PLAINTIFFS' MEMORANDUM OF LAW  
IN SUPPORT OF THEIR SECOND MOTION FOR  
SUMMARY JUDGMENT AND FOR A PERMANENT INJUNCTION**

**TABLE OF CONTENTS**

	<b>Page</b>
INTRODUCTION .....	1
BACKGROUND .....	3
A.    Prior Proceedings In This Court .....	3
1.    Factual Background .....	3
2.    This Court’s Summary Judgment Decision And Permanent Injunction .....	5
B.    The D.C. Circuit’s Holdings And Directions For Remand.....	7
C.    Proceedings And Facts Developed On Remand .....	8
ARGUMENT .....	10
I.    Plaintiffs Are Entitled To Summary Judgment On Their Copyright Claims.....	10
A.    Plaintiffs Own Valid Copyrights In The Works .....	10
B.    PRO Cannot Meet Its Burden To Show That Its Indiscriminate, Wholesale Copying Of Plaintiffs’ Works Is Fair Use .....	12
1.    Factor 1: PRO’s Use Is Not Transformative, Its Purpose Is The Same Purpose That Plaintiffs Already Serve, And PRO Fails To Satisfy The D.C. Circuit’s “Essential To Comply With Any Legal Duty” Test.....	13
a.    PRO’s alleged goal of facilitating access is not transformative because Plaintiffs already serve this purpose.....	14
b.    PRO cannot meet its burden to show that its postings of Plaintiffs’ standards are essential to complying with a legal duty. ....	16
2.    Factor 2: Plaintiffs’ Copyrighted Works Are Important To Advance The Progress Of Science And The Useful Arts .....	24
3.    Factor 3: PRO Copies The Entirety Of The Works—It Does Not Even Attempt To Limit Its Copying And Distribution To Portions Of Standards That Are Essential To Complying With The Law .....	24
4.    Factor 4: PRO’s Substitutional Use Undermines The Actual And Potential Markets for Plaintiffs’ Works.....	25
II.   Plaintiffs Are Entitled To Summary Judgment On Their Claims Of Trademark Infringement And False Designation Of Origin .....	31

**TABLE OF CONTENTS**  
**(continued)**

	<b>Page</b>
A. Nominative Fair Use Is An Affirmative Defense .....	32
B. PRO Cannot Meet Its Burden To Establish Any Of The Three Nominative Fair Use Factors .....	33
III. Plaintiffs Are Entitled To A Permanent Injunction .....	38
A. Plaintiffs Will Suffer Irreparable Harm Without An Injunction.....	38
1. Economic Harm And Ramifications To Plaintiffs’ Business Model.....	38
2. Harm To Plaintiffs’ Right To Exclude Caused By Repeat Infringement.....	40
3. Harm To Plaintiffs’ Reputations .....	41
B. Remedies Available At Law Are Inadequate.....	42
C. The Balance Of Hardships Favors Issuing An Injunction .....	43
D. The Public Interest Favors Issuing An Injunction. ....	44
CONCLUSION.....	45

**TABLE OF AUTHORITIES**

	<b>Page(s)</b>
<b>FEDERAL CASES</b>	
<i>Am. Geophysical Union v. Texaco Inc.</i> , 60 F.3d 913 .....	14
<i>Am. Soc’y for Testing &amp; Materials, et al. v. Public.Resource.Org, Inc.</i> , 896 F.3d 437 (D.C. Cir. 2018).....	<i>passim</i>
<i>Am. Soc’y for Testing &amp; Materials v. Public.Resource.org, Inc.</i> , No. 13-CV-1215 (TSC), 2017 WL 473822 (D.D.C. Feb. 2, 2017) .....	<i>passim</i>
<i>Australian Gold, Inc. v. Hatfield</i> , 436 F.3d 1228 (10th Cir. 2006) .....	35
<i>Authors Guild, Inc. v. HathiTrust</i> , 755 F.3d 87 (2d Cir. 2014).....	14, 16, 20
<i>Authors Guild v. Google, Inc.</i> , 804 F.3d 202 (2d Cir. 2015).....	20, 25, 27
<i>Bell Helicopter Textron Inc. v. Airbus Helicopters</i> , 78 F. Supp. 3d 253 (D.D.C. 2015).....	42
<i>BMG Music v. Gonzalez</i> , 430 F.3d 888 (7th Cir. 2005) .....	29
<i>Breaking the Chain Found. v. Capitol Educ. Support, Inc.</i> , 589 F. Supp. 2d 25 (D.D.C. 2008).....	40, 41
<i>Cambridge Univ. Press v. Patton</i> , 769 F.3d 1232 (11th Cir. 2014) .....	26
<i>Campbell v. Acuff-Rose Music, Inc.</i> , 510 U.S. 569 (1994).....	<i>passim</i>
<i>Capitol Records, LLC v. ReDigi Inc.</i> , 910 F.3d 649 (2d Cir. 2018).....	31
<i>Celotex Corp. v. Catrett</i> , 477 U.S. 317 (1986).....	12
<i>Century 21 Real Estate Corp. v. Lendingtree, Inc.</i> , 425 F.3d 211 (3d Cir. 2005).....	32, 33

**TABLE OF AUTHORITIES**  
**(continued)**

	<b>Page(s)</b>
<i>Chrysler Corp. v. Newfield Publ’ns</i> , 880 F. Supp. 504 (E.D. Mich. 1995).....	33
<i>Concrete Mach. Co. v. Classic Lawn Ornaments, Inc.</i> , 843 F.2d 600 (1st Cir. 1988).....	44
<i>David’s Bridal, Inc. v. House of Brides, Inc.</i> , No. 06 Civ. 5660 (SRC), 2010 WL 323306 (D.N.J. Jan. 20, 2010) .....	34
<i>eBay Inc. v. MercExchange, LLC</i> , 547 U.S. 388 (2006).....	6, 38
<i>Fox News Network, LLC v. TVEyes, Inc.</i> , 883 F.3d 169 (2d Cir. 2018).....	12, 13, 14, 16
<i>Fox Television Stations, Inc. v. Filmon X LLC</i> , 966 F. Supp. 2d 30 (D.D.C. 2013) .....	42, 44, 45
<i>Groupe SEB USA, Inc. v. Euro-Pro Operating LLC</i> , 774 F.3d 192 (3d Cir. 2014).....	40
<i>Hanley-Wood LLC v. Hanley Wood LLC</i> , 783 F. Supp. 2d 147 (D.D.C. 2011).....	41
<i>Harper &amp; Row Publishers, Inc. v. Nation Enters.</i> , 471 U.S. 539 (1985).....	25, 26
<i>Home Box Office, Inc. v. Showtime/The Movie Channel Inc.</i> , 832 F.2d 1311 (2d Cir. 1987).....	35
<i>Infinity Broad. Corp. v. Kirkwood</i> , 150 F.3d 104 (2d Cir. 1998).....	14, 16
<i>Int’l Info. Sys. Sec. Certification Consortium v. Sec. Univ., LLC</i> , 823 F.3d 153 (2d Cir. 2016).....	32
<i>Int’l Kennel Club of Chi., Inc. v. Mighty Star, Inc.</i> , 846 F.2d 1079 (7th Cir. 1988) .....	36
<i>Kizas v. Webster</i> , 492 F. Supp. 1135 (D.D.C. 1980), <i>aff’d</i> , 770 F.2d 524 (D.C. Cir. 1983).....	17

**TABLE OF AUTHORITIES**  
**(continued)**

	<b>Page(s)</b>
<i>KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc.</i> , 543 U.S. 111 (2004).....	32
<i>Mary Kay, Inc. v. Weber</i> , 601 F. Supp. 2d 839 (N.D. Tex. 2009) .....	32
<i>Mazer v. Stein</i> , 347 U.S. 201 (1954).....	31
<i>Metro-Goldwyn-Mayer Studios, Inc. v. Grokster</i> , 518 F. Supp. 2d 1197 (C.D. Cal. 2007) .....	40
<i>MOB Music Publ’g. v. Zanzibar on the Waterfront, LLC</i> , 698 F. Supp. 2d 197 (D.D.C. 2010).....	11
<i>New Kids on the Block v. News Am. Publ’g, Inc.</i> , 971 F.2d 302 (9th Cir. 1992) .....	33
<i>Presidio Components, Inc. v. Am. Technical Ceramics. Corp.</i> , 702 F.3d 1351 (Fed. Cir. 2012).....	38
<i>Roeslin v. District of Columbia</i> , 921 F. Supp. 793 (D.D.C. 1995).....	11
<i>S &amp; R Corp. v. Jiffy Lube Int’l, Inc.</i> , 968 F.2d 371 (3d Cir. 1992).....	40
<i>Soc’y of the Holy Transfiguration Monastery, Inc. v. Archbishop Gregory of Denver, Colorado</i> , 685 F. Supp. 2d 217 (D. Mass. 2010), <i>aff’d</i> 689 F.3d 29 (1st Cir. 2012).....	14
<i>TechnoMarine SA v. Giftports, Inc.</i> , 758 F.3d 493 (2d Cir. 2014).....	40
<i>Toyota Motor Sales, U.S.A., Inc. v. Tabari</i> , 610 F.3d 1171 (9th Cir. 2010) .....	32, 34
<i>TrafficSchool.com, Inc. v. Edriver Inc.</i> , 653 F.3d 820 (9th Cir. 2011) .....	36
<i>Triad Sys. Corp. v. Se. Express Co.</i> , 64 F.3d 1330 (9th Cir. 1995) .....	44

**TABLE OF AUTHORITIES**  
**(continued)**

	<b>Page(s)</b>
<i>Trout v. Garrett</i> , 780 F. Supp. 1396 (D.D.C. 1991).....	11, 31, 33
<i>Veeck v. S. Bldg. Code Cong. Int’l</i> , 293 F.3d 791 (5th Cir. 2002) .....	33, 34
<i>Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc.</i> , 342 F.3d 191 (3d Cir. 2003).....	16
<i>Worldwide Church of God v. Philadelphia Church of God, Inc.</i> , 227 F.3d 1110 (9th Cir. 2000) .....	12, 13, 14, 25
 <b>FEDERAL STATUTES</b>	
5 U.S.C. § 552.....	3, 4
5 U.S.C. § 552(a)(1).....	6
15 U.S.C. § 1051.....	32
15 U.S.C. § 1116.....	38
17 U.S.C. § 101.....	42
17 U.S.C. § 102(b).....	6, 12
17 U.S.C. § 105.....	6
17 U.S.C. § 107.....	12, 31
17 U.S.C. § 107(1).....	13
17 U.S.C. § 107(2).....	24
17 U.S.C. § 107(3).....	24
17 U.S.C. § 107(4).....	25
17 U.S.C. § 410(c).....	11
17 U.S.C. § 502(a).....	38
17 U.S.C. § 504(c).....	43



**TABLE OF AUTHORITIES**  
**(continued)**

	<b>Page(s)</b>
42 U.S.C. § 6833(b)(2)(A).....	19
42 U.S.C. § 6833(b)(2)(B)(i) .....	19
<b>STATE STATUTES</b>	
Alaska Stat. Ann. § 44.42.067(b)-(c).....	30
Md. Public Safety Code § 9-303.....	30
Tex. Agric. Code Ann. § 17.072.....	30
<b>FEDERAL REGULATIONS</b>	
10 C.F.R. § 433.4.....	20
40 C.F.R. § 2.2.4.3(d) .....	18
40 C.F.R. § 2.2.6.....	18
40 C.F.R. § 63.14.....	21
40 C.F.R. § 86.113-04(a)(1).....	17
40 C.F.R. § 1065.710.....	18
46 C.F.R. § 56.50-105(a)(1)(ii).....	15
46 C.F.R. § 56.01-2.....	19
46 C.F.R. § 56.25-20(b).....	19
46 C.F.R. § 56.60-2.....	21
46 C.F.R. § 119.440.....	21
59 C.F.R. 130.....	15
<b>STATE REGULATIONS</b>	
30 Tex. Admin. Code § 217.326.....	30

**TABLE OF AUTHORITIES**  
**(continued)**

**Page(s)**

**CONSTITUTIONAL PROVISIONS**

U.S. Const. Article I, § 8, cl. 8.....24

**OTHER AUTHORITIES**

3 M. Nimmer & D. Nimmer,  
Nimmer on Copyright § 13.05[A][4] (1993).....26

Pierre N. Leval, *Toward a Fair Use Standard*,  
103 Harv. L. Rev. 1105 (1990).....14

## INTRODUCTION

The D.C. Circuit remanded for this Court to consider Public.Resource.Org’s (“PRO”) affirmative defenses of copyright and trademark fair use on a standard-by-standard basis.<sup>1</sup> The D.C. Circuit did not decide whether PRO’s defenses would apply to any or all of the standards that had been incorporated by reference. Indeed, the court recognized “it may . . . turn out that PRO . . . use[s] incorporated standards in a manner not encompassed by the fair use doctrine.” *Am. Soc’y for Testing & Materials, et al. v. Public.Resource.Org, Inc.*, 896 F.3d 437, 447 (D.C. Cir. 2018) (“*ASTM II*”). That is exactly how it has turned out. Under the fair use framework that the D.C. Circuit said must apply in this case,<sup>2</sup> PRO’s fair use defense fails as a matter of law.

The D.C. Circuit’s opinion makes clear that the key question on copyright fair use is whether the specific text PRO copied and distributed is “*essential* to complying with [a] legal duty,” as compared to just “help[ing] inform one’s understanding of the law.” *ASTM II*, 896 F.3d at 450 (emphasis added). If PRO cannot show that everything it copied and distributed imposes “legally binding requirements” or “legal obligations,” then PRO cannot meet its burden to prove that its use was fair. *Id.* at 442-43. PRO has not done the work the D.C. Circuit said it must. Plaintiffs asked PRO to identify, *inter alia*, which portions of each incorporated standard are alleged to impose binding legal obligations on individuals or entities. 2d Supp. SMF ¶¶ 30.

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<sup>1</sup> Plaintiffs move for summary judgment on 217 of their copyrighted standards (“Works”), identified in Appendix A, all of which PRO copied and freely distributed online.

Plaintiffs cite to their previously filed Statements of Material Fact, Dkt. 118-2 Plaintiffs’ Statement of Material Facts (“SMF”), Supplemental Statements of Material Fact, Dkt. 155-1 (“Supp. SMF”), and supporting evidence. Plaintiffs have supplemented those statements of material facts with additional facts cited in Plaintiffs’ Second Supplemental Statement of Material Facts (“2d Supp. SMF”), filed concurrently herewith.

<sup>2</sup> Plaintiffs respectfully disagree with the D.C. Circuit’s bases for reversing this Court’s prior fair use ruling. Regardless, PRO cannot meet its burden under the fair use framework articulated by the D.C. Circuit.

PRO's response makes clear it will not be concerned with the D.C. Circuit's direction. PRO would say only that, if "[t]he entirety of [a] standard . . . is incorporated by reference," then PRO can copy and distribute en masse everything between the covers without concerning itself with what, if anything, between those covers imposes a legal duty. *Id.* ¶¶ 31-32 (quoting PRO Interrog. Resp. No. 19 at p. 14, *id.* No. 21, at p. 25). PRO cannot so shirk its obligations under the D.C. Circuit's opinion. That court could not have been clearer in rejecting PRO's contention that all standards incorporated by reference and all parts of those standards can be treated "interchangeably." *ASTM II*, 896 F.3d at 449 (emphasis added).

PRO cannot meet its burden to show fair use under the D.C. Circuit's legal test for *any* of the Works in issue here. For many of the Works, PRO has not identified authority (in the cover sheets that it places in front of its copies of the standards, or anywhere else) that incorporates the specific Work by reference *at all*. 2d Supp. SMF ¶¶ 36 (a), (c), (e)-(f), (k), (n), (p)-(u), (aa)-(dd), (hh), (qq), (vv), (iii), (nnn), (ppp). These are a subset of 95 (92 ASTM, 1 NFPA, 2 ASHRAE) Works for which PRO identifies inaccurate citations, including to regulations that do not exist and citations to authorities which incorporate a different or later version of the standard (*i.e.*, a different Work). *Id.* ¶¶ 36, 37, 41, 42. PRO cannot claim fair use as to these standards when it has not even identified an incorporation by reference. Moreover, PRO cites to authorities that incorporate standards in a manner that the D.C. Circuit said was unlikely to give rise to fair use, including as "discretionary reference procedure[s]" and as an obligation for public not private actors. *Id.* ¶¶ 43, 45-48; *ASTM II*, 896 F.3d at 443. Beyond that PRO's copying and posting is over-inclusive for each and every one of the Works, which all contain a mix of material, including portions that impose no legally binding obligation and thus are "not essential to complying with any legal duty." *Id.* at 450. Many portions—including background information

on the history of Plaintiffs or the standard, informational notes, diagrams, and explicitly nonbinding appendixes—impose no legal duties (or were not incorporated at all). 2d Supp. SMF ¶¶ 49, 50-56, 59-68. PRO cannot justify its indiscriminate copying as fair use.

PRO also cannot meet its burden to show that its mass use of Plaintiffs’ logos and word marks qualifies for the affirmative trademark defense of nominative fair use, and PRO should be enjoined from doing so. If, as it says, PRO’s goal is to tell the public what “the law” is in various jurisdictions, PRO could simply provide the name of the jurisdiction and how that jurisdiction names its codes without using Plaintiffs’ logos and word marks.

PRO has no new facts and no new law to change or challenge this Court’s prior conclusions as to ownership, copyright validity, or any of the other issues this Court decided in *Am. Soc’y for Testing & Materials v. Public.Resource.org, Inc.*, No. 13-CV-1215 (TSC), 2017 WL 473822 (D.D.C. Feb. 2, 2017) (“*ASTM I*”). Plaintiffs are entitled to summary judgment and a permanent injunction to stop PRO’s mass exploitation of their copyrights and trademarks.

## **BACKGROUND**

### **A. Prior Proceedings In This Court**

#### **1. Factual Background**

Plaintiffs filed this action in August 2013, seeking to enjoin PRO’s mass copying and distribution of Plaintiffs’ Works and PRO’s infringement of Plaintiffs’ trademarks.

Plaintiffs are self-funded nonprofit 501(c)(3) organizations that are part of a “complex public-private partnership” for the development of voluntary consensus standards in fields like public safety, building and construction, and product testing. *ASTM I*, 2017 WL 473822, at \*2; *see also* SMF ¶¶ 9, 86, 130. The standards Plaintiffs create are technical documents designed to be used by industry professionals. Congress has recognized and preserved this partnership through statute, encouraging federal agencies to incorporate by reference, pursuant to 5 U.S.C.

§ 552. *ASTM I*, 2017 WL 473822, at \*3. The creation of voluntary consensus standards and their incorporation by governmental entities “achieve several goals, including eliminating the cost to the federal [and state] government[s] of developing [their] own standards, encouraging long-term growth for U.S. enterprises, promoting efficiency, competition, and trade, and furthering the reliance upon private sector expertise.” *Id.* (citing OMB Revised Circular, at 14); *see also, e.g.*, SMF ¶¶ 95-98, 265-69.

Plaintiffs support their overall mission-driving activities and recoup the substantial cost (often in the millions or tens of millions of dollars) of creating their standards the way that copyright owners generally do. They sell copies of the standards, including revised and updated versions, to members of the public who use them—typically, people in the affected industries who use the Works in their professional trade. *See ASTM I*, 2017 WL 473822, at \*4, 10-11; SMF ¶¶ 45-47, 106-08, 153-54. Without copyright protection, Plaintiffs “will face significant difficulty raising the necessary revenue to continue producing high-quality voluntary consensus standards.” *ASTM I*, 2017 WL 473822, at \*13 (citing Plaintiffs’ and amici’s arguments). In addition to their sales and licensing activities, Plaintiffs make all of the Works available for free to the public on read-only websites they administer. 2d Supp. SMF ¶ 85.

PRO says it is devoted to “mak[ing] 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 I*, 2017 WL 473822, at \*2 (quoting Dkt. 120-3, DSMF ¶¶ 1-2). Yet, as is clear from its conduct, PRO serves an ideological function much more than a practical one.<sup>3</sup> Before this litigation started, PRO copied the Works en masse, introducing errors

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<sup>3</sup> While PRO claims its goal is to disseminate “the law,” PRO has engaged in a campaign to copy and publish copyrighted materials that are not government authored and impose no legal obligations, including annotations of decisions interpreting statutes (a matter now before the

in the process, either by scanning them and using optical character recognition software to convert images of the scanned pages into text; or by having untrained individuals retype and reformat the text into HTML, SMF ¶¶ 182, 185, 188-91, 195, 214-216. PRO posted its error-ridden copies of Plaintiffs' Works—which still bear Plaintiffs' word marks (and in some instances logos too)—on its website and on the Internet Archive, where any user could download, copy, or print them for free, without any restrictions on use of the standards or further dissemination. *ASTM I*, 2017 WL 473822, at \*3; SMF ¶¶ 23, 185, 201, 204. Plaintiffs' Works have been downloaded tens of thousands of times (or more) from the PRO and Internet Archive sites. SMF ¶¶ 241, 242; 2d Supp. SMF ¶¶ 98, 102.

## **2. This Court's Summary Judgment Decision And Permanent Injunction**

Following nearly two years of intensive discovery, both sides moved for summary judgment on Plaintiffs' copyright and trademark infringement claims,<sup>4</sup> and Plaintiffs moved for a permanent injunction. This Court granted Plaintiffs' motion (as well as the Plaintiffs' summary judgment motion in the AERA case, *see* No. 14-cv-0857) and denied PRO's motion. The Court's opinion resolved numerous issues, the vast majority of which the D.C. Circuit did not disturb.

*First*, the Court rejected PRO's challenge to Plaintiffs' ownership of the Works. The Court held that Plaintiffs' production of registration certificates for the Works established a *prima facie* claim of copyright ownership, and that PRO failed to raise a triable issue on ownership. *ASTM I*, 2017 WL 473822, at \*6.

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Supreme Court in *Georgia v. Public.Resource.Org, Inc.*, Case No. 18-1150 (to be argued December 2, 2019), and the Bluebook guide to legal citations, which Mr. Malamud purchased, rekeyed, and converted to XHTML, encouraging others to distribute it, *see* C. Malamud Ltr. to Dean M. Minow, Harvard Law School, *available at* <https://law.resource.org/pub/us/code/blue/harvard.letter.pdf>.

<sup>4</sup> Plaintiffs moved for summary judgment on nine representative Works. PRO moved for summary judgment on all of Plaintiffs' Works.

*Second*, the Court found no merit in PRO’s claim that the standards were noncopyrightable “system[s]” or “method[s] of operation” under 17 U.S.C. § 102(b). The Court held that the standards “contain expression that is certainly technical but that still bears markings of creativity,” and that “there are many possible forms of expression”—including competing standards—“through which the technical material in the standards could be conveyed.” *ASTM I*, 2017 WL 473822, at \*9 (citations omitted).

*Third*, the Court rejected PRO’s constellation of arguments that the copyrights in Plaintiffs’ Works were “stripped upon the incorporation by reference.” *Id.* at \*15. The Court found nothing in the Copyright Act (including 17 U.S.C. § 105, which says that “work[s] of the United States Government” may not be copyrighted) supporting that result. *Id.* at \*10. The Court further concluded that federal policy and legislation enacted against the backdrop of incorporation by reference embraced, and even encouraged, SDOs’ copyrights while simultaneously ensuring the standards are “reasonably available to the class of persons affected thereby,” 5 U.S.C. § 552(a)(1). *Id.* The Court rejected PRO’s argument that common-law cases holding legal edicts authored by government officers in their capacities as such divested Plaintiffs’ copyrights in their privately authored standards. *Id.* at \*11-14. And the Court further rejected PRO’s arguments for divestiture based on merger and *scènes à faire*. *Id.* at \*15.

*Fourth*, the Court rejected PRO’s affirmative defenses of fair use under copyright and trademark law. *Id.* at \*15-18, 20-24. These issues were the subject of the D.C. Circuit’s opinion, which we discuss in the next section (and below in the argument section).

*Fifth*, the Court concluded that Plaintiffs had demonstrated that each of the permanent injunction factors favored that relief. *Id.* at \*24-25 (citing *eBay Inc. v. MercExchange, LLC*, 547 U.S. 388, 391 (2006)). There was no doubt that PRO’s ongoing threat of continued copyright



infringement posed an irreparable injury and that money damages would be an inadequate remedy. *Id.* at \*24 (citing cases). The Court also concluded that the balance of harms and public interest favored an injunction. *Id.* at \*25.

**B. The D.C. Circuit’s Holdings And Directions For Remand**

The D.C. Circuit reversed this Court’s summary judgment order on the ground that the Court should reconsider PRO’s copyright and nominative trademark fair use defenses under standards the D.C. Circuit articulated.

PRO’s sole ground of appeal on copyright ownership was that the participation of federal government employees in the creation of certain standards rendered them noncopyrightable works of the U.S. Government. The D.C. Circuit rejected this argument on the ground that it was either “forfeited” (because PRO had not adequately presented it in the motions before this Court) or “meritless.” *ASTM II*, 896 F.3d at 446.

On copyright validity, the D.C. Circuit declined to reach PRO’s argument that incorporation stripped Plaintiffs’ Works of copyright protection. The D.C. Circuit instead directed that this Court reconsider PRO’s fair use defense. The D.C. Circuit faulted the parties for “treating the standards interchangeably,” and directed reconsideration of PRO’s defense on “a fuller record regarding the nature of each of the standards at issue, the way in which they are incorporated, and the manner and extent to which they were copied by PRO.” *Id.* at 449.

On the first fair use factor—whether PRO’s copying and distribution of Plaintiffs’ Works is “transformative”—the D.C. Circuit set forth a sliding scale test: with respect to each portion of each Work that PRO used, the pertinent question is whether the copied material merely “help[ed] inform one’s understanding of the law” or whether it was “essential to complying with [a] legal duty.” *Id.* at 450. If the former, PRO’s use would be “less transformative” and not supportive of “wholesale copying”; if the latter, the factor would support PRO’s fair use defense.

*Id.* The D.C. Circuit provided further direction with respect to the remaining fair use factors, including directing this Court to answer three specific questions about the harm to Plaintiffs' potential markets and the value of the Works. *Id.* at 453.

On Plaintiffs' trademark infringement claims, the D.C. Circuit directed this Court to reconsider PRO's affirmative defense of nominative fair use. The D.C. Circuit said that "it may well be that PRO overstepped when it reproduced both ASTM's logo and its word marks," but that this Court's analysis of that defense would "provide valuable insight both into whether trademark infringement has occurred and, if so, how broad a remedy is needed to address the injury." *Id.* at 456-57.

### **C. Proceedings And Facts Developed On Remand**

Following the D.C. Circuit's decision, PRO reposted its versions of Plaintiffs' Works to the Internet Archive website. 2d Supp. SMF ¶ 11.

PRO did not do the standard-by-standard analysis that the D.C. Circuit instructed.

First, PRO has not produced any analysis of *how* the standards are incorporated by reference. For example, PRO did nothing to confirm that the Works in fact *are* incorporated by reference in the jurisdictions to which PRO cites on its cover pages and in its interrogatory responses (let alone whether they are *currently* incorporated by reference in the relevant jurisdiction). *See* 2d Supp. SMF ¶¶ 30-32. Nor has PRO analyzed how any incorporated by reference Work actually does (or does not) impose binding legal obligations on anyone. *See id.* Instead, PRO says that it "does not provide legal advice, and cannot provide advice regarding what legal obligations an individual or entity may face as a result of hundreds of different federal, state, and local laws," and it therefore does not engage in any analysis of which parts of standards have a legally binding effect. *Id.* ¶ 31 (PRO Interrog. Resp. No. 19 at p. 14).

Second, PRO has not shown that it is unable to paraphrase any (or any portions) of the standards or limit its postings to those portions of the standards actually essential to complying with a binding legal duty. Instead, PRO states, without analysis, that “[t]he entirety of each standard” at issue here, “is incorporated by reference into the law, and it is therefore necessary to reproduce the entire standard verbatim in order to accurately state what the law is.” *Id.* ¶ 32 (quoting PRO Interrog. Resp. No. 21 at p. 25).

Instead of undertaking the prescribed standard-by-standard analysis and adjusting its activities accordingly, PRO responded to the D.C. Circuit’s opinion by reposting wholesale copies of Plaintiffs’ Works to the Internet Archive website. 2d Supp. SMF ¶ 11. Today, anyone can freely download, copy, print, edit, and redistribute PRO’s copies of Plaintiffs’ standards from the Internet Archive website, regardless of whether those standards merely “help inform one’s understanding” or whether they are “essential to complying with” the law. *ASTM II*, 896 F.3d at 450; SMF ¶¶ 202, 209; 2d Supp. SMF ¶ 92. PRO has done nothing to ensure that individuals will not download Plaintiffs’ Works and use them for commercial purposes. For instance, PRO does not use the Internet Archive’s offerings that restrict access to content, *i.e.*, “borrowing” offered through Internet Archive’s Open Library initiative, whereby “registered users can borrow books for two weeks, after which the loaned item expires and is removed from the user’s device,” or *encrypted* access to Digital Accessible Information SYstem (DAISY) for eligible blind or print-disabled individuals. 2d Supp. SMF ¶¶ 108-09; *see also* Supp. SMF ¶¶ 1-3 (regarding the Chafee Amendment and libraries for the visually impaired). It is thus unsurprising that PRO’s unauthorized copies of Plaintiffs’ Works are available for purchase on the third-party website scribd.com. *See* 2d Supp. SMF ¶¶ 105-06.

Moreover, notwithstanding PRO's claimed ignorance regarding *who* downloads the Works or how they use the copies they have made, 2d Supp. SMF ¶ 104 (quoting PRO Interrog. Resp. No. 23 at p. 34), PRO's documents show that numerous industry professionals and tradespeople have contacted PRO about the standards it copies and posts, *id.* ¶ 93 (PRO\_00267293, engineer asking after remand from the D.C. Circuit, "Does Friday's decision mean you can update the site?"; PRO\_00267241, engineering firm saying it heard about PRO from a "colleague" and asking "How might we access the documents you offer?"); PRO Interrog. Resp. No. 22 at p. 29). Of course, these are the same people who use Plaintiffs' standards as part of their professional work—and who otherwise would either purchase a copy or access the relevant standard through Plaintiffs' free access websites. *Id.* ¶¶ 77, 93-94.

Other evidence confirms that PRO's postings of Plaintiffs' Works compete with and substitute for Plaintiffs' sales and offering of standards on their free access websites, harm that will increase if PRO is not enjoined. *Id.* ¶¶ 91-104. Internet Archive's website is ranked in the top 300 websites around the world and reaches millions of people. *Id.* ¶ 103. As just one example, when Plaintiffs last moved for summary judgment, the 2011 NEC had been downloaded 30,350 times from the Internet Archive through February 2015. SMF ¶ 242. As of October 4, 2019 (approximately 13 months since PRO reposted the NEC to the Internet Archive website), the number is 40,151 and counting—meaning in just over a year, there have been nearly 10,000 *additional* downloads. 2d Supp. SMF ¶ 102. The harm to Plaintiffs is growing.

## ARGUMENT

### **II. PLAINTIFFS ARE ENTITLED TO SUMMARY JUDGMENT ON THEIR COPYRIGHT CLAIMS**

#### **A. Plaintiffs Own Valid Copyrights In The Works**

This Court already has ruled that Plaintiffs own copyrights in nine Works that were the subject of Plaintiffs' previous motion for summary judgment. *See ASTM I*, 2017 WL 473822, at

\*7 (“Plaintiffs are the owners of the copyrights at issue and have standing to bring their claims.”). Plaintiffs’ registration certificates create a presumption of validity and ownership with respect to both Plaintiffs’ individually registered works and to the original works that comprise Plaintiffs’ registered compilations.<sup>5</sup> *Id.* at \*6-7; 17 U.S.C. § 410(c); *MOB Music Publ’g. v. Zanzibar on the Waterfront, LLC*, 698 F. Supp. 2d 197, 202 (D.D.C. 2010). Plaintiffs have registration certificates for each of the Works. 2d Supp. SMF ¶¶ 1-10. PRO’s sole challenge to the ownership ruling was that the participation of government employees on some technical committees for developing standards rendered the Works noncopyrightable. The D.C. Circuit rejected that argument as either “forfeited” or “meritless.” *ASTM II*, 896 F.3d at 446. This Court’s prior ownership rulings are therefore law of the case for the nine Works on which Plaintiffs previously moved. *Trout v. Garrett*, 780 F. Supp. 1396, 1425 & n.71 (D.D.C. 1991).

The reasoning of the Court’s prior decision applies with equal force to the other 208 standards in this motion. As with the previous standards, PRO has not and cannot come forward with any “evidence *disproving* Plaintiffs’ authorship.” *ASTM I*, 2017 WL 473822, at \*7; *see also 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).<sup>6</sup> And this Court

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<sup>5</sup> NFPA and ASHRAE’s registrations and certain of ASTM’s registrations were effective within five years of first publication of the Works. 2d Supp. SMF ¶¶ 7, 9, 10. As to the ASTM Works that were registered more than five years after the date of first publication, the Court already correctly determined that it will “accord[] these [registrations] the same evidentiary weight as if they had been registered within five years.” *ASTM I*, 2017 WL 473822, at \*7 (citing 17 U.S.C. § 410(c)).

<sup>6</sup> To the extent PRO’s challenges to copyrightability were not forfeited, the D.C. Circuit reserved those questions for a future panel on “another day” and they are not the subject of this remand. *ASTM II*, 896 F.3d at 441 (“Because the district court erred in its application of both fair use doctrines, we reverse and remand, leaving for another day the far thornier question of whether standards retain their copyright after they are incorporated by reference into law.”).

has already thoroughly considered and rejected PRO's arguments regarding copyrightability under § 102(b) and the effect of incorporation by reference on copyright. *See ASTM I*, 2017 WL 473822, at \*7. There is no basis for reconsidering the Court's prior rulings now.

**B. PRO Cannot Meet Its Burden To Show That Its Indiscriminate, Wholesale Copying Of Plaintiffs' Works Is Fair Use**

The D.C. Circuit remanded for consideration of whether PRO's use—on a standard-by-standard basis—qualifies as “fair” under 17 U.S.C. § 107<sup>7</sup> as the D.C. Circuit construed that provision in this case. To be clear, Plaintiffs respectfully disagree that this Court's prior fair use determination was incorrect, or that the D.C. Circuit's delineation of the fair use factors is correct under the law of fair use as articulated by the Supreme Court and other courts around the country. Recognizing that the D.C. Circuit's opinion is the law of the case and must be followed on remand, Plaintiffs respectfully reserve their disagreements for further appellate proceedings.

But even under the D.C. Circuit's test, PRO's fair use defense cannot succeed. As the party claiming the affirmative defense of fair use, PRO carries both the evidentiary burden and ultimate burden of proof here. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590 (1994); *Fox News Network, LLC v. TVEyes, Inc.*, 883 F.3d 169, 176 (2d Cir. 2018). At summary judgment, PRO must “make a sufficient showing” to establish its fair use defense. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986). If PRO cannot meet its burden on the balance of factors, its defense fails at summary judgment. *See Worldwide Church of God v. Philadelphia Church of God, Inc.*, 227 F.3d 1110, 1120 (9th Cir. 2000) (no fair use when first three factors weighed

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<sup>7</sup> Fair use has four statutory considerations: “(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.

against fair use and fourth was, at best, neutral); *TVEyes*, 883 F.3d at 181 (no fair use when first factor “slightly” favored fair use, second was neutral, and remaining two weighed against it).

**1. Factor 1: PRO’s Use Is Not Transformative, Its Purpose Is The Same Purpose That Plaintiffs Already Serve, And PRO Fails To Satisfy The D.C. Circuit’s “Essential To Comply With Any Legal Duty” Test**

The first fair use factor requires courts to consider “the purpose and character of the use.” 17 U.S.C. § 107(1).<sup>8</sup> The D.C. Circuit remanded for consideration of “whether, in certain circumstances, distributing copies of the law for purposes of *facilitating public access* could constitute transformative use.” *ASTM II*, 896 F.3d at 450 (emphasis added).

PRO’s wholesale copying and public distribution is not a transformative use. First, PRO “merely repackages or republishes the [Works],” *TVEyes*, 883 F.3d at 177 (citations omitted); and PRO’s alleged purpose of “facilitating public access” does not render that repackaging transformative because Plaintiffs have the same informative purpose—and, indeed, achieve that end more accurately than PRO does. Second, PRO cannot meet its burden to show that what it has copied and distributed is essential to complying with a legal duty. For 95 (93 ASTM, 1 NFPA, 2 ASHRAE) of the standards, the regulation on which PRO relies *does not* incorporate by reference the specific Work PRO posted. 2d Supp. SMF ¶¶ 36, 37, 41-42. PRO has done nothing to determine the effect of the incorporation by reference authority and whether it is of a kind that the D.C. Circuit said was unlikely to give rise to fair use. *ASTM II*, 896 F.3d at 442-43, 447 (describing, e.g., “discretionary reference procedure[s]”). Even where PRO can show that an incorporation by reference imposes some legal obligation to comply with portions of a

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<sup>8</sup> Although the D.C. Circuit reversed this Court’s ruling on the commercial nature of PRO’s use, the fact that it is a nonprofit does not make its use transformative: “the absence of a commercial use merely eliminates the presumption of unfairness.” *See Worldwide Church of God*, 227 F.3d at 1117 (citing *Campbell*, 510 U.S. at 584, “[T]he mere fact that a use is educational and not for profit does not insulate it from a finding of infringement . . .”).

standard, PRO copied the standards wholesale, including portions that have *not* been incorporated by reference or that are *not* “essential to complying with any legal duty.” *Id.* at 450.

a. *PRO’s alleged goal of facilitating access is not transformative because Plaintiffs already serve this purpose.*

A transformative use “adds something new, with a further purpose or different character” from the original work. *Campbell*, 510 U.S. at 579. It is not enough that the use “add[s] value or utility.” *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87, 96 (2d Cir. 2014). The question instead is whether a defendant’s use of a work “serves a new and different function from the original work and is not a substitute for it.” *Id.*; *see also Worldwide Church of God*, 227 F.3d at 1120 (translation not fair use). “[A] use of copyrighted material that ‘merely repackages or republishes the original’ is unlikely to be deemed a fair use.” *TVEyes*, 883 F.3d at 177 (quoting *Infinity Broad. Corp. v. Kirkwood*, 150 F.3d 104, 108 (2d Cir. 1998) (quoting Pierre N. Leval, *Toward a Fair Use Standard*, 103 Harv. L. Rev. 1105, 1111 (1990))).

The D.C. Circuit affirmed this Court’s rejection of PRO’s argument that its use of Plaintiffs’ Works was transformative because PRO provides them to the public in a centralized collection or in different formats, *e.g.*, making copies more accessible to the visually impaired. *See ASTM II*, 896 F.3d at 450 (citing *Am. Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 923-24; *see also Soc’y of the Holy Transfiguration Monastery, Inc. v. Archbishop Gregory of Denver, Colorado*, 685 F. Supp. 2d 217, 227 (D. Mass. 2010), *aff’d* 689 F.3d 29 (1st Cir. 2012) (“A simple repackaging of a work in a new format . . . is not transformative when the result is simply a mirror image reflected on a new mirror.”).

PRO must therefore show its purpose—“to make the law and other government materials more widely available,” *ASTM II*, 896 F.3d at 444 (quoting Dkt. 121-5, Malamud Decl. ¶ 4)—transforms the Work by “add[ing] something new,” *TVEyes*, 883 F.3d at 176 (citing *HathiTrust*,



755 F.3d at 96). It cannot. PRO does not serve a purpose that is meaningfully different from Plaintiffs' purpose in providing free, read-only access to the same incorporated Works. *See* 2d Supp. SMF ¶ 86. Plaintiffs' offerings allow anyone to easily view incorporated by reference standards online for free. 2d Supp. SMF ¶ 85. Their dissemination of the information goes beyond that, including NFPA's "Free Access Widget," that allows organizations—such as government entities that have incorporated by reference NFPA standards—to embed an imaged link on their websites, directing visitors to the free copies of NFPA standards on the NFPA website. *See* SMF ¶ 101. Plaintiffs view this provision of information as educational and central to their overall mission.<sup>9</sup> 2d Supp. SMF ¶¶ 86-87.

Moreover, Plaintiffs better serve PRO's professed purpose of informing the public about "the law" because Plaintiffs' versions (a) are authentic copies, which reflect rigorous quality assurance review, whereas PRO's versions *still* contain errors; and (b) provide (as PRO admits) more accurate information regarding the incorporation status of each posted standard.<sup>10</sup> The principal difference between the way Plaintiffs make the standards freely accessible and the way PRO does is one of formatting: Plaintiffs make the standards available for online access in read-

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<sup>9</sup> NFPA also created the CodeFinder™ tool, which is designed to "creat[e] general public awareness of some of the jurisdictions" that "may require the use of NFPA codes and/or standards." 2d Supp. SMF ¶ 90.

<sup>10</sup> PRO's versions of Plaintiffs' standards *still* contain errors resulting from its scanning and rekeying techniques. *See* 2d Supp. SMF ¶¶ 13-18. PRO postings include other inaccuracies, such as citations to federal regulations that do not exist, *see* 2d Supp. SMF ¶ 37 (PRO's Internet Archive posting of the 2000 edition of NFPA 101, states that it has been posted "By Authority of the Code of Federal Regulations: 59 CFR 130," but there is no title 59 to the C.F.R.), and to superseded and incorrect standards, 2d Supp. SMF ¶¶ 36, 38-40 (*e.g.*, PRO posted the 1982 version of ASTM E23, where 46 C.F.R. § 56.50-105(a)(1)(ii) incorporates the 1996 version, 2d Supp. SMF ¶ 36(fff)). PRO has expressly acknowledged that it is Plaintiffs—and not PRO's postings—that provide the best source for authoritative standards, "urg[ing]" visitors to consult "with the standards organizations" to access "definitive versions of these important laws." 2d Supp. SMF ¶ 20. PRO's implicit recognition that its postings are not accurate undermines its claim of transformative use. Its postings are an inferior substitute for the versions of the standards that Plaintiffs already make available to the public on their websites.

only format. PRO, in contrast, makes the entire published standard available for printing and copying, without restrictions on further redistribution. *See* 2d Supp. SMF ¶ 92. PRO “essentially republishes [Plaintiffs’] content unaltered from its original form, with no ‘new expression, meaning or message’”—a use that is substitutional and not transformative. *TVEyes*, 883 F.3d at 178 (quoting *HathiTrust*, 755 F.3d at 96 (quoting *Campbell*, 510 U.S. at 579)) (citing *Kirkwood*, 150 F.3d at 106 (transmitting unaltered radio broadcasts in real time over telephone lines not transformative); *Video Pipeline, Inc. v. Buena Vista Home Entm’t, Inc.*, 342 F.3d 191, 199-200 (3d Cir. 2003) (streaming previews of movies without commentary not transformative)).

b. *PRO cannot meet its burden to show that its postings of Plaintiffs’ standards are essential to complying with a legal duty.*

In remanding for this Court to make standard-by-standard determinations, the D.C. Circuit recognized that the incorporation by reference process varies and incorporation *per se* does not justify copying and distribution as fair use. *ASTM II*, 896 F.3d at 442. The D.C. Circuit drew a distinction between whether the specific portions of the standard PRO copied and distributed is “*essential* to complying with [one’s] legal duty,” as compared to just “*help[ing]* inform one’s understanding of the law.” *Id.* at 450 (emphasis added). Despite the D.C. Circuit’s clear mandate, PRO refused to do any standard-by-standard or grouping-of-standards (let alone portion-by-portion) analysis. It has, instead, insisted that *all* standards incorporated by reference are “the law” and it is entitled to post *all* of those standards verbatim.<sup>11</sup> 2d Supp. SMF ¶¶ 31-32

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<sup>11</sup> Indeed, PRO’s absolutist position may be even more extreme than it appears on its face. Many standards incorporate other standards by reference, which may in turn reference other standards. 2d Supp. SMF ¶ 69. The logical conclusion of PRO’s position is that *any* jurisdiction’s incorporation of *any* portion of a standard would lead to an unrestricted fair use to copy and distribute dozens of other standards that are cross-referenced in their entirety. That result cannot be squared with the D.C. Circuit’s standard-by-standard approach and insistence that the standards could not be treated “interchangeably.” *ASTM II*, 896 F.3d at 449. Such a “fair use” result also would put the United States out of compliance with its international obligations under Art. 13 of the WTO TRIPS Agreement, which requires that the United States

(PRO Interrog. Resp. No. 19 at p. 14, Resp. No. 21 at p. 25).<sup>12</sup> Based on the undisputed evidence, PRO cannot meet its burden of proving that everything PRO copied and distributed is “*essential* to complying with any legal duty.” *ASTM II*, 896 F.3d at 450 (emphasis added).

1. As a threshold matter, many of the Works are not incorporated by the regulation(s) PRO identifies in the cover sheets that it places in front of its copies, and PRO has failed to identify any other incorporating reference. 2d Supp. SMF ¶¶ 36 (a), (c), (e)-(f), (k), (n), (p)-(u), (aa)-(dd), (hh), (qq), (vv), (iii), (nnn), (ppp). These are a subset of the 95 (92 ASTM, 1 NFPA, 2 ASHRAE) of PRO’s cover sheets that include inaccurate citations, also including when PRO’s cited authority actually incorporates a different or later version of the standard at issue. *Id.* ¶¶ 36, 37, 41-42. PRO cannot claim fair use as to these standards when it has not even met its burden to identify an incorporation by reference.

Even those Works where PRO has identified some incorporation by reference, many are similar to those that the D.C. Circuit specifically identified as unlikely to give rise to fair use. This set includes “discretionary reference procedure[s]” that are incorporated in such a manner as to be optional or references—*i.e.*, “*helpful*” but not “*essential*,” *ASTM II*, 896 F.3d at 447, 450 (emphasis added), as well as optional standards and standards that do not govern private conduct.

For example, 40 C.F.R. § 86.113-04(a)(1)<sup>13</sup> incorporates ASTM D86-07, the “Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure.”

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“shall confine limitations or exceptions to exclusive rights to certain special cases which do not conflict with a normal exploitation of the works and do not unreasonably prejudice the legitimate interest of the right holder.”

<sup>12</sup> PRO cannot attempt to backtrack from this sworn admission now through belated analysis. *See Kizas v. Webster*, 492 F. Supp. 1135, 1147 (D.D.C. 1980), *aff’d*, 770 F.2d 524 (D.C. Cir. 1983) (rejecting contradictory evidence as “last-minute effort by the defendants to raise an issue of material fact precluding summary judgment”).

2d Supp. SMF ¶ 45. But as the D.C. Circuit explained, this standard is incorporated “as a ‘[r]eference procedure’ used by the Environmental Protection Agency and regulated motor-vehicle manufacturers.” *ASTM II*, 896 F.3d at 450. It “merely tells the regulated entity how it can ensure that the gasoline it uses in fact satisfies the codified requirements.” *Id.*

As another example, PRO identifies 40 C.F.R. Appendix D to Part 75, the “Optional S02 Emmissional Data Protocol for Gas-Fired and Oil-Fired Units” as the regulation incorporating ASTM standard D1217-93, the “Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer.” 2d Supp. SMF ¶ 46. This regulation incorporates the standard to be exactly what it says—*optional*. Subsection 2.2.4.3(d) provides an alternative procedure for sampling oil from shipment tanks or containers and testing samples for density, of which D1217-93 is just one. *See* 40 C.F.R. §§ 2.2.4.3(d), 2.2.6 (cross-referencing other standards in Part 60). Each of these is an option, provided as a reference point, but none of the many options is itself legally binding. This is true for other ASTM Works as well. *See* 2d Supp. SMF ¶ 47 (listing examples).

In the same manner as the discretionary or optional incorporations by reference, each of the NFPA Works contain explicitly “Permissive [R]ules,” which are “those that identify actions that are allowed but not required,” and “are normally used to *describe options or alternative methods*.” 2d Supp. SMF ¶ 57 (2014 NEC at art. 90-5(B)). Such optional rules are delineated “by the use of the terms *shall be permitted* or *shall not be required*.” *Id.* An example of such an optional rule is article 324.56(A) of the 2014 NEC regarding FCC Systems Alterations, which

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<sup>13</sup> Notably, PRO identifies only 40 C.F.R. § 1065.710 as incorporating D86-07. *See* 2d Supp. SMF ¶ 36(oo). This identification is incorrect; 40 C.F.R. § 1065.710 incorporates the 2012 version of D86, not the 2007 version PRO posted. *See* 40 C.F.R. §§ 1065.710; 1065.1010.

states “Alterations to FCC systems shall be permitted.”<sup>14</sup> *Id.* at art. 324.56(A). There is no binding legal obligation in telling the installer of electrical equipment they can make alterations.

Further, some of the incorporations by reference “have no direct legal effect on any private party’s conduct.” *ASTM II*, 896 F.3d at 443. As just one example, ASTM A 307 is incorporated by reference in 46 C.F.R. § 56.25-20(b), which governs the design, construction, and installation of marine vessel piping systems. 2d Supp. SMF ¶ 49. The regulation provides that, with respect to bolts used in ships’ and barges’ piping systems, “[w]hen class 250 cast iron flanges are used or when class 125 cast iron flanges are used with ring gaskets, the bolting material must be carbon steel conforming to ASTM A 307 (incorporated by reference, *see* 46 CFR § 56.01-2), Grade B.” 46 C.F.R. § 56.25-20(b). The persons governed by that regulation—those who design, construct and install piping systems in marine vessels—do not need access to ASTM A 307 to comply with this regulation. They simply have to purchase bolt that are designated as A 307, Grade B; they do not need to know how to manufacture such bolts.

Likewise, the D.C. Circuit recognized that the case for fair use was lessened where a standard was incorporated in such a way to only trigger *public* and not *private* obligations. *ASTM II*, 896 F.3d at 443 (these standards are “incorporated for the purpose of triggering agency obligations,” *see, e.g.*, 42 U.S.C. § 6833(b)(2)(A) (“Whenever . . . [ASHRAE] Standard 90.1-1989 . . . [is] revised, the Secretary [of Energy] shall . . . determine whether such revision will improve energy efficiency in commercial buildings.”), or establishing regulatory floors, *see, e.g.*, *id.* § 6833(b)(2)(B)(i) (“If the Secretary makes an affirmative determination,” each state shall

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<sup>14</sup> Likewise, NFPA standards include provisions that explicitly provide for discretion and dictate that there are alternative options for compliance. For example, the National Fuel Gas Code (2006 ed.) states: “The provisions of this code are not intended to prevent the use of any material, method of construction, or installation procedure not specifically prescribed by this code, provided any such alternative is acceptable to the authority having jurisdiction.” 2d Supp. SMF ¶ 58. It is the authorities, not Plaintiffs, who decide what is ultimately required.

have two years to “certify that it has reviewed and updated the provisions of its commercial building code regarding energy efficiency” such that its code “meet[s] or exceed[s] [the] revised standard.”). Here, PRO’s proffered evidence of ASHRAE 90.1 being incorporated by reference (*i.e.*, the cover sheets) points to incorporation of Standard 90.1 into 10 C.F.R. § 433.4, which states “[a]ll Federal agencies shall design new Federal buildings” that meet the ASHRAE standards, but does not impose a similar requirement on private actors. 2d Supp. SMF ¶ 43.

PRO’s wholesale copying of these nonbinding standards is not at all tailored to that which is *essential* to complying with private legal duties, nor does PRO limit its dissemination in any other relevant respect, such as to those individuals who are governed by even these optional references. *Cf. Authors Guild v. Google, Inc.*, 804 F.3d 202, 222 (2d Cir. 2015) (“*Google Books*”) (limiting features of use “substantially protects against its serving as an effectively competing substitute”); *HathiTrust*, 755 F.3d at 91 (print-disabled “patron[s] must obtain certification of [their] disability from a qualified expert”). Its conduct therefore does not fall within the limited circumstances the D.C. Circuit posited could be a transformative purpose.

2. Under the D.C. Circuit’s holding, even where there is some incorporation by reference that imposes a legal obligation on some individual, PRO cannot show a transformative use for publishing the *entire* standard. The D.C. Circuit explained that PRO might be able to show a transformative use *only if* it limited its posting to “the relevant portions of that particular standard.”<sup>15</sup> *ASTM II*, 896 F.3d at 450. PRO has posted entire standards indiscriminately, stating (incorrectly) that “[t]he entirety of each standard . . . is incorporated by reference into the law, and it is therefore necessary to reproduce the entire standard verbatim in order to accurately state what the law is.” 2d Supp. SMF ¶¶ 31, 32 (PRO Resp. to Interrogs. 19, 21.). PRO cannot

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<sup>15</sup> Even then, the D.C. Circuit required “[f]aithfully reproducing the relevant text.” *ASTM II*, 896 F.3d at 451. PRO’s versions are not accurately reproduced. 2d Supp. SMF ¶¶ 13-19.

meet its burden under the D.C. Circuit’s test. Here are just a few examples where the regulation cited by PRO only incorporates a portion of a standard:

- **ASTM B122/B122M:** PRO Identifies 46 C.F.R. § 119.440 as the incorporating by reference regulation, but that regulation only incorporates B122/B122M with respect to copper alloy C71500, one of eleven copper alloys addressed in the standard. The portions of the standard related to the other ten copper alloys are unnecessary to understand the minimum thickness for copper alloy C71500.
- **ASTM B85-96:** PRO identifies 46 C.F.R. § 56.60-2 as the incorporating by reference regulation, but that regulation only incorporates one table within ASTM B85-96—table X-2—and states that “[t]ension tests shall be performed to determine tensile strength, yield strength, and elongation” in accordance with the minimum value in X-2. The remainder of the standard is unnecessary to determine the minimum value in X-2. Table X-2 also contains values for sheer strength and fatigue strength that are unnecessary to understand the minimum value for the required tension tests.
- **ASTM E145-94 (2001):** PRO identifies 40 C.F.R. § 63.14 as the incorporating by reference regulation, but Appendix A to Subpart PPPP of 40 C.F.R. § 63.14 references only forced draft oven types IIA or IIB. The ASTM E145-94 (2001) standard addresses other types of forced draft ovens.

These examples are representative of other Works where PRO posted the entire standard, but only a portion is actually incorporated by reference into law. 2d Supp. SMF ¶ 48.

Likewise, the D.C. Circuit said fair use was not likely for material that merely “help[s] inform one’s understanding of the law [without being] essential to complying with any legal duty.” *ASTM II*, 896 F.3d at 450. That is exactly the case for PRO’s wholesale copying of Works, all of which include substantial material that either has nothing to do with compliance or is certainly not “essential” to complying with a legal obligation. 2d Supp. SMF ¶¶ 48-56 (ASTM), 59-68 (NFPA), 70-76 (ASHRAE).

As just one example, NFPA 70 includes at least the following material that decidedly does not impose any legal obligation:

- **Prefatory Notices and Background Information:** NFPA 70 includes notices and disclaimers, as well as an introductory note that gives information on the

background and history of the standard. 2d Supp. SMF ¶¶ 62, 63 (e.g., Supp. Pauley Decl. Ex. P (NFPA 70, 2014 ed.) at NFPA-PR0098062-64).

- **Reference and Informational Notes:** NFPA 70 includes hundreds of “Informational Notes” that provide context, background, cross-references, and other explanatory material. The NEC expressly states that these Notes “are *informational only and are not enforceable as requirements of this Code.*” *Id.* ¶ 64 ((e.g., Supp. Pauley Decl. Ex. P (NFPA 70, 2014 ed.) at art. 90.5(C)). Examples include Informational Note No. 2: “Some cleaning and lubricating compounds can cause severe deterioration of many plastic materials used for insulating and structural applications in equipment.” *Id.* at art. 300.20(B) (Note).
- **Diagrams, Figures, and Illustrations:** NFPA 70 includes figures that illustrate concepts in the text, but that do not dictate any legal duty. For example, 2011 NEC, Figure 220.1 provides a graphical overview of the organization of Article 220. *Id.* ¶ 65 (e.g. Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at 70-61). PRO could explain that organizational structure in its own words or offer a different way of visualizing the Article’s structure. The Figure may be “help[ful]” in “inform[ing] one’s understanding” of the text, but the Figure itself does not dictate any independent requirements. *ASTM II*, 896 F.3d at 450.
- **Examples:** NFPA 70 includes numerous examples, such as art. 550.4(A), which is a list of examples of a mobile home not intended as a dwelling unit: “those equipped for sleeping purposes only, contractor’s on-site offices, construction job dormitories, mobile studio dressing rooms, banks, clinics, mobile stores, or intended for the display or demonstration of merchandise or machinery.” 2d Supp. SMF ¶ 66 (e.g. Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at art. 550.4(A); *see also id.* art. 552.47(A)). These illustrative examples do not impose any requirement.
- **Informational Annexes:** NFPA 70’s informational annexes contain material that “is not a part of the requirements of this NFPA document but is included for informational purposes only.” 2d Supp. SMF ¶ 67 (e.g., Supp. Pauley Decl. Ex. P at Annex A). Some informational annexes contain information that is not binding unless “*specifically adopted.*” *Id.* at Annex H.

All of NFPA’s Works contain some or all of these nonbinding portions. 2d Supp. SMF ¶¶ 59-68 (listing examples for all NFPA standards).

ASTM’s standards also contain numerous nonbinding portions. Many of ASTM’s standards contain appendices that are expressly labeled “Non-mandatory Information.” 2d Supp. SMF ¶¶ 51(a), 52. Such appendices contain explanatory information that is not required to



perform the standard's requirements. *Id.* Additionally, ASTM standards contain supplemental sections including: explanatory notes, summaries, significance and use sections, keywords, definitions, terminology, classification, cited references, and metric conversions. *Id.* ¶¶ 51(e), 55. These resources are nonbinding aids. *Id.* A number of ASTM's standards contain a Supplemental Requirements section that states: "The following supplementary requirements shall apply only when specified by the purchaser in the inquiry, contract or order, for agencies of the U.S. Government." *Id.* ¶¶ 51(e), 56. Additionally, as ASTM's committees are frequently updating and revising its standards, many of ASTM's standards include a summary of changes, and those summaries are nonbinding. *Id.* ¶¶ 51(b)-(c), 53-54. In many instances, ASTM publishes a metric version of its standards. In numerous instances, PRO copied and distributed the entire metric version in addition to the nonmetric version, where the metric version was not referenced by the regulation. *Id.* ¶ 35.

Similarly, all three of the ASHRAE Standards at issue in this case contain forewords, information about ASHRAE and its Standards-creation process, ASHRAE policy statements, and other information that could impose no legal obligation. 2d Supp. SMF ¶¶ 70-76. The ASHRAE Standards even contain multiple "Informative Appendices," which are expressly labeled as not being part of the Standards and just for informational purposes. *Id.* ¶¶ 72-74. PRO copied and posted those too.

PRO's wholesale copying of these non-mandatory portions takes far more than necessary under the D.C. Circuit's test and is therefore not fair use. PRO could have written its own paraphrased material, drawn its own figures, or omitted nonbinding portions. PRO has shown itself fully capable of excising portions of Plaintiffs' Works, as it has done in removing many of

Plaintiffs' logos. But PRO did none of these things when it came to copying Plaintiffs' Works. It instead copied and distributed the entirety of the text verbatim.

**2. Factor 2: Plaintiffs' Copyrighted Works Are Important To Advance The Progress Of Science And The Useful Arts**

The second factor considers “the nature of the copyrighted work.” 17 U.S.C. § 107(2). While often framed as a dichotomy between fictional vs. factual expression, the ultimate goal of copyright is to “promote the Progress of Science and the useful Arts.” U.S. Const. art. I, § 8, cl. 8. Copyright in each of Plaintiffs' Works serves the end of advancing the progress of science, technical and technological advancement, as well as public safety. *See ASTM I*, 2017 WL 473822, at \*17 (D.D.C. 2017).

The D.C. Circuit agreed, *ASTM II*, 896 F.3d at 451, but added that this factor may vary with the extent to which the particular copyrighted Work imposes a legally binding obligation, *id.* at 452. On this factor, PRO must justify its copying by demonstrating the legally binding nature of each standard (or portion of standard) PRO has copied. PRO does not and cannot satisfy this burden. As explained above, PRO fails to meet its burden by not citing or citing incorrect authorities to even make a threshold showing that 96 Works were incorporated by reference. 2d Supp. SMF ¶¶ 36, 37. Even then, PRO copied standards that are incorporated in a discretionary or optional manner. *Id.* PRO also copied the entirety of the Works verbatim, including portions not incorporated by reference, and portions that impose no legal duty. *Id.* ¶¶ 48-56, 59-68, 70-76. The second fair use factor weighs against a finding of fair use.

**3. Factor 3: PRO Copies The Entirety Of The Works—It Does Not Even Attempt To Limit Its Copying And Distribution To Portions Of Standards That Are Essential To Complying With The Law**

The third fair use factor looks to “the amount and substantiality of the portion used in relation to the copyrighted work as a whole.” 17 U.S.C. § 107(3). “While ‘wholesale copying’”

like PRO's "'does not preclude fair use *per se*,' copying an entire work 'militates against a finding of fair use.'" *Worldwide Church of God*, 227 F.3d at 1118 (emphasis added); *see also Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 565 (1985) ("the fact that a substantial portion of the infringing work was copied verbatim is evidence of the qualitative value of the copied material"). "[T]he extent of permissible copying varies with the purpose and character of the use," *Campbell*, 510 U.S. at 586-87; but "[t]he larger the quantity of the copyrighted text the [user] can see and the more control the [user] can exercise over what part of the text she sees, the greater the likelihood that those revelations could serve her as an effective, free substitute for the purchase," *Google Books*, 804 F.3d at 222. The D.C. Circuit therefore instructed this Court to consider whether PRO had "limit[ed] its copying to only what is required to fairly describe the standard's legal import." *ASTM II*, 896 F.3d at 452.

PRO has not even attempted to so limit its copying, either in what it posts online or to whom it disseminates the Works. As explained above, PRO's wholesale, indiscriminate copying sweeps in provisions not incorporated by reference, provisions that do not impose legal obligations on individuals, and simply informative portions. *See*, Section I.B.1.b *supra*. PRO's copying and distribution of large quantities of material that "does not govern any conduct" makes this factor lean decidedly in Plaintiffs' favor. *ASTM II*, 896 F.3d at 452; *see also Google Books*, 804 F.3d at 222 (third factor turned on fact that defendant "does not reveal matter that offers the marketplace a significantly competing substitute for the copyrighted work").

**4. Factor 4: PRO's Substitutional Use Undermines The Actual And Potential Markets for Plaintiffs' Works**

The fourth fair use factor—harm to the copyright owner's "potential market[s]" or the "value of the copyrighted work," 17 U.S.C. § 107(4)—requires the Court to consider "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 both the original and derivative works. *Campbell*, 510 U.S. at 590 (quoting 3 M. Nimmer & D. Nimmer, *Nimmer on Copyright* § 13.05[A][4] (1993)); *Harper & Row Publishers*, 471 U.S. at 568. It is “[PRO’s] burden to affirmatively establish that [its] conduct could not even ‘potentially’ harm the Plaintiffs’ market.” *ASTM I*, 2017 WL 473822, at \*18; *see also Cambridge Univ. Press v. Patton*, 769 F.3d 1232, 1276 (11th Cir. 2014) (“The central question . . . is not whether Defendants’ use of Plaintiffs’ Works caused Plaintiffs to lose some potential revenue. Rather, it is whether Defendants’ use—taking into account the damage that might occur if ‘everybody did it’—would cause substantial economic harm such that allowing it would frustrate the purposes of copyright by materially impairing Defendants’ incentive to publish the work.”). It is “difficult[]” for a defendant like PRO to meet its burden of proving fair use if it does not present “favorable evidence about relevant markets.” *Campbell*, 510 U.S. at 590. PRO cannot meet its burden because the undisputed expert testimony, and an application of the D.C. Circuit’s guidance, demonstrate that PRO’s conduct harms Plaintiffs’ potential market.

In addition to this traditional fair use analysis, the D.C. Circuit said this Court should consider three questions relating to this factor. Addressing each question in turn demonstrates that, as the Supreme Court contemplated in *Campbell*, PRO cannot meet its burden of demonstrating this factor weighs in its favor.

First, the D.C. Circuit urged consideration of whether PRO’s activities could lead to “additional [market] harm” where Plaintiffs themselves offer free access online “presumably . . . without entirely cannibalizing sales of their standards.” *ASTM II*, 896 F.3d at 453. Plaintiffs’ provision of free online access *further*s their market for disseminating their Works, both as a matter of logic and evidence. Plaintiffs offer their standards in a read-only

format: this carefully controlled environment, designed to be educational and informational, does not substitute or compete in the commercial marketplace for the sale of less restricted versions of Plaintiffs' Works. 2d Supp. SMF ¶¶ 85, 88. Those industry professionals and tradespeople who purchase the Works to use in the course of their work might reference the free access websites, but these websites would not be a substitute for purchasing a copy that can be downloaded and searched from Plaintiffs. *Id.* ¶¶ 88, 89. Indeed, Plaintiffs view the provision of free access as furthering their overall mission by encouraging more users to visit Plaintiffs' websites, and to do so more frequently, creating opportunities for them to learn about Plaintiffs' other mission-driven activities, including by potentially deciding to purchase the materials so they can have a copy to download. *Id.* ¶¶ 86, 87.

PRO's postings, by contrast, are substitutional and cannibalistic for each of Plaintiffs' sales, licensing efforts, and free access distribution. PRO intentionally makes its versions of Plaintiffs' Works—which are widely viewed, *see, e.g.*, 2d Supp. SMF ¶ 98 (accesses to PRO's postings dwarf visits to ASTM's Reading Room); *id.* ¶ 102 (10,000 views of 2011 NEC in 13 months)—available on an anonymous and unrestricted basis. *Id.* ¶¶ 92, 104. This means its users include those individuals and entities who would otherwise purchase or license copies of Plaintiffs' standards. *Id.* ¶ 93. Its users may also include *further* would-be infringers who, by virtue of the anonymity PRO and the Internet Archive, offer and easily profit unlawfully from selling PRO's copies. Indeed, PRO's efforts to make available Plaintiffs' Works in rekeyed formats mean that down-the-line infringers can capitalize on that work, distributing counterfeit copies of PRO's downloadable PDFs. *See id.* ¶¶ 105-06. Regardless of whether PRO intends that result, the fair use inquiry requires consideration of the natural consequences of its activities. *See Authors Guild*, 804 F.3d at 223 (even if copying done for “valuably transformative purpose,”

copying can lead to harm “if done in a manner that results in widespread revelation of sufficiently significant portions of the original as to make available a significantly competing substitute”). Notably, PRO *could*, but does not, utilize the technical features—such “borrowing” and encrypted access for those with print disabilities—that Internet Archive employs to restrict access to other copyrighted material on its website. 2d Supp. SMF ¶¶ 108-09.

The unrebutted economic evidence—not to mention common sense—dictate that the answer to the D.C. Circuit’s first question is that PRO’s activities threaten substantial market harm even where Plaintiffs also provide access to their standards. Plaintiffs have already shown a “substantial[] adverse impact on the potential market.” *Campbell*, 510 U.S. at 590. The expert report of John Jarosz recognized Plaintiffs’ provision of freely accessible copies but concluded that, nonetheless, PRO’s activities would threaten the market both for Plaintiffs’ standards and for derivative works. 2d Supp. SMF ¶ 91 (Jarosz Rep. ¶¶ 85, 92, 100, 130-49). That makes sense. As explained above, the principal difference between Plaintiffs’ online copies and PRO’s postings (beyond the errors in PRO’s versions) is that Plaintiffs’ sell physical copies and digital copies in a variety of formats and offer more limited read-only access for free, whereas PRO offers no-cost, unrestricted access to Plaintiffs’ Works in formats that can be readily downloaded or used to develop derivative works. “[P]arties that are interested in or affected by [Plaintiffs’ standards], but who do not necessarily need a digital or hardcopy of the standards” are well served by Plaintiffs’ online versions. *Id.* ¶¶ 86, 88 (Jarosz Rep. ¶ 86). Parties who are, instead, regularly using Plaintiffs’ standards during the course of their work, interested in reselling copies of Plaintiffs’ standards, or planning to develop unlicensed derivative works are likely to use PRO’s versions of the standards. *See, e.g.*, SMF ¶ 240 (“Multiple resellers and merchants have downloaded copies of NFPA’s standards that were posted on the Internet and have attempted to

resell them or package them with other products for sale.”); *see also* *BMG Music v. Gonzalez*, 430 F.3d 888, 890 (7th Cir. 2005) (noting that because “[m]usic downloaded for free from the Internet is a close substitute for purchased music[,] many people are bound to keep the downloaded files without buying originals”).

Second, the D.C. Circuit asked this Court to consider whether there would continue to be a market for Plaintiffs’ standards if PRO limited its copying to only those parts of Plaintiffs’ standards that “provide[] information essential to comprehending one’s legal duties.” *ASTM II*, 896 F.3d at 450. PRO has no supporting evidence to answer this question because, as demonstrated, PRO does *not* so limit its copying and has maintained that position since the D.C. Circuit’s remand, despite that court’s clear direction that PRO should revisit its wholesale copying. *See supra* at Section I.B.1.b.; 2d Supp. SMF ¶¶ 31-32 (Resp. to Interrog. Nos. 19, 21). Accordingly, PRO has failed to meet its burden on this question.

Third, the D.C. Circuit instructed this Court to consider whether PRO’s copying and distribution of Plaintiffs’ Works would harm any markets for derivative works, *e.g.*, if PRO’s posting of out-of-date standards would help or harm the market for the current versions of the same standards. *See ASTM II*, 896 F.3d at 453. The evidence is undisputed that PRO’s use harms the market for the current and most up-to-date works. ASTM frequently reapproves the identical standard in an updated version, and in those circumstances, the old version is a perfect substitute for the up-to-date version. 2d Supp. SMF ¶ 96. For example, ASTM’s B580 issued in 1979 has been reapproved and reissued in its original form every five years. Even when ASTM standards, are revised in subsequent versions, the latest version frequently retains substantial portions of the prior version. *Id.* ¶ 35. As a result, for many users, the availability of a free and unrestricted copying of the prior version may be a perfect or near-perfect substitute for the

current version of the standard, such that the unrestricted download and distribution of the Works at issue will interfere with the market for these derivative Works. *Id.* ¶ 96.

The evidence also shows that PRO does not limit its copying to out-of-date standards. Many jurisdictions expressly incorporate—and PRO promptly posts—the most recently published versions of Plaintiffs’ standards. *See, e.g.*, Tex. Agric. Code Ann. § 17.072 (West) (incorporating most recent versions of ASTM D4177); Md. Public Safety Code § 9-303 (West) (same for NFPA 101); 30 Tex. Admin. Code § 217.326 (same for NFPA 1 and NFPA 70); Alaska Stat. Ann. § 44.42.067(b)-(c) (same for ASHRAE 90.1). For example, after the parties filed their initial summary judgment motions, NFPA published the 2017 NEC. PRO has now copied and distributed that version. 2d Supp. SMF ¶ 110.

Further, new editions are not the only derivative product Plaintiffs make. Plaintiffs develop and sell products and services, such as commentaries and trainings. SMF ¶¶ 155, 263. “[A] significant driver of the Plaintiffs’ sale” of such items “is the provision of the protected publications in, for example, trainings and seminars.” 2d Supp. SMF ¶¶ 83, 84 (Jarosz Rep. ¶ 146). If the standards were freely available for download online, as PRO has made them, Plaintiffs’ sales of these products and services would likely decrease. *Id.* ¶ 95. Moreover, if third parties were able to quote freely from these standards to, like PRO claims to, inform the public about “the law,” Plaintiffs would lose their competitive advantage in marketing such services and products. *Id.*; *see also* SMF ¶ 264.

In sum, the undisputed evidence shows that none of the answers to the D.C. Circuit’s three questions supports PRO’s fair use defense. Plaintiffs invest substantial resources in developing their standards in everything from salaries and benefits for Plaintiffs’ staff, to expenses for technical committee meetings, to costs associated with editing, producing,



distributing, and promoting the standards. SMF ¶¶ 43-44, 104-05, 152. PRO’s systematic, mass copying and distribution of the Works undermine Plaintiffs’ resource investment, “imped[ing] the purpose of copyright to incentivize new creative works by enabling their creators to profit from them.” *Capitol Records, LLC v. ReDigi Inc.*, 910 F.3d 649, 662 (2d Cir. 2018); *see also Mazer v. Stein*, 347 U.S. 201, 219 (1954) (“The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in ‘Science and useful Arts.’ Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.”). There is no evidence that this factor, or any of the other § 107 factors, supports PRO’s affirmative defense.

**III. PLAINTIFFS ARE ENTITLED TO SUMMARY JUDGMENT ON THEIR CLAIMS OF TRADEMARK INFRINGEMENT AND FALSE DESIGNATION OF ORIGIN**

In addition to infringing Plaintiffs’ copyrights, PRO infringed Plaintiffs’ trademarks and continues to do so. It is undisputed that PRO acquired genuine versions of Plaintiffs’ standards and retyped their content to create new documents that Plaintiffs neither authorized nor quality controlled. SMF ¶¶ 187-95. PRO did not appeal the Court’s ruling that Plaintiffs own valid trademarks or the Court’s analysis of the ordinary likelihood of confusion factors. *ASTM II*, 896 F.3d at 456. This Court’s prior ruling on these issues is “law of the case” as to the standards at issue in Plaintiffs’ prior motions. *See, e.g., Trout*, 780 F. Supp. at 1425 & n.71. PRO has no evidence warranting a different result as to any of the other Works. The question on remand, therefore, is whether PRO can raise a triable issue on its affirmative defense of nominative fair use. PRO cannot make this showing, and Plaintiffs are entitled to a permanent injunction preventing PRO from resuming its use of Plaintiffs’ marks.

**A. Nominative Fair Use Is An Affirmative Defense**

Nominative fair use is an affirmative defense, not an element of Plaintiffs' trademark claim. Once a Lanham Act "plaintiff has met its burden of proving that confusion is likely, the burden then shifts to the defendant to show that its nominative use of plaintiff's mark is nonetheless fair." *Century 21 Real Estate Corp. v. Lendingtree, Inc.*, 425 F.3d 211, 232 (3d Cir. 2005). Treating nominative fair use as an affirmative defense (as opposed to yet another factor in the already unwieldy likelihood of confusion calculus, as some circuits do<sup>16</sup>) respects the Supreme Court's existing jurisprudence on trademark fair use. Specifically, the Supreme Court has ruled that classic fair use—use of a mark in its descriptive sense and not as a designation of source—is an affirmative defense to trademark infringement, in part because "some possibility of consumer confusion must be compatible with fair use." *KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc.*, 543 U.S. 111, 121 (2004). In other words, the Supreme Court treats confusion and fairness as separate and distinct concepts. An approach that blends these concepts together into a single test—a test in which fairness must *negate* instead of coexist with confusion—is untenable.<sup>17</sup> Instead, if a plaintiff proves that confusion is likely, consideration of the fair use defense should follow. *Century 21*, 425 F.3d at 222; *see also, e.g., Mary Kay, Inc. v.*

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<sup>16</sup> *See Int'l Info. Sys. Sec. Certification Consortium v. Sec. Univ., LLC*, 823 F.3d 153, 168 (2d Cir. 2016); *Toyota Motor Sales, U.S.A., Inc. v. Tabari*, 610 F.3d 1171, 1175 (9th Cir. 2010). *But see ASTM II*, 896 F.3d at 457 (recognizing that circuits are divided on correct analysis and declining to resolve which approach is correct).

<sup>17</sup> Demonstrating that the approach is unworkable, circuits that treat nominative fair use as part of the likelihood of confusion analysis cannot even agree on the correct way to do so. The Second Circuit has directed "district courts . . . to consider the Ninth Circuit and Third Circuit's nominative fair use factors, *in addition to* the [traditional likelihood of confusion] factors." *Int'l Info. Sys.*, 823 F.3d at 168 (emphasis added). In the Ninth Circuit, by contrast, the nominative fair use factors supplant the multi-factor test that courts typically employ to determine consumer confusion. *See Tabari*, 610 F.3d at 1175.

*Weber*, 601 F. Supp. 2d 839, 854 (N.D. Tex. 2009) (treating nominative fair use as an affirmative defense); *Chrysler Corp. v. Newfield Publ'ns*, 880 F. Supp. 504, 512 (E.D. Mich. 1995) (same).

Here, the Plaintiffs have demonstrated a likelihood of confusion. *ASTM I*, 2017 WL 473822, at \*23; *see also ASTM II*, 896 F.3d at 456 (“PRO [does not] contest[] . . . the district court’s analysis of the ordinary likelihood of confusion factors”).<sup>18</sup> Accordingly, it is PRO’s burden to prove that its use is fair.

**B. PRO Cannot Meet Its Burden To Establish Any Of The Three Nominative Fair Use Factors**

To succeed on its nominative fair use defense, PRO must show that: (1) its use of Plaintiffs’ trademarks is necessary to describe Plaintiffs’ Works; (2) PRO used only so much of Plaintiffs’ marks as is reasonably necessary to identify Plaintiffs’ Works; *and* (3) PRO has not done anything to suggest sponsorship or endorsement by Plaintiffs or to inaccurately describe the relationship between the parties or their Works. *Century 21*, 425 F.3d at 222; *see also New Kids on the Block v. News Am. Publ’g, Inc.*, 971 F.2d 302, 308 (9th Cir. 1992). PRO’s original use of Plaintiffs’ marks certainly does not satisfy and cannot satisfy any (let alone all three) of these elements and neither does its current practice.

*First*, PRO does not need to use *any* of Plaintiffs’ marks—their logos, organizational names, or even the names they give their standards—in furtherance of its claimed mission of educating the public about legally binding obligations. PRO could fulfill this mission by posting the legally binding obligations without identifying Plaintiffs as the source of that information and without using their word marks. This is exactly what the party posting building codes in *Veeck* did. He posted the codes and identified them as building codes of the relevant jurisdictions; he

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<sup>18</sup> Again, PRO’s failure to challenge this Court’s previous analysis of the likelihood-of-confusion factors means it is bound by that holding. *See Trout*, 780 F. Supp. at 1425 & n.71.

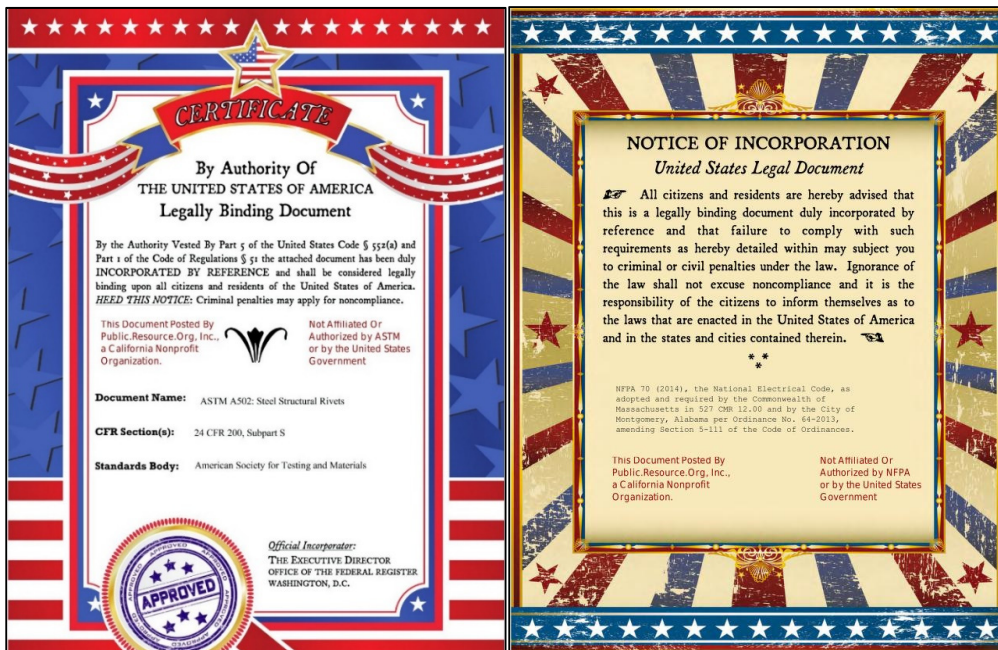
did not identify the institutional author, Southern Building Code Congress International, by name, let alone display its logos. *Veeck v. S. Bldg. Code Cong. Int'l*, 293 F.3d 791, 793 (5th Cir. 2002). Here, PRO could similarly identify Plaintiffs' Works merely as works incorporated by reference into the relevant federal regulations, without identifying Plaintiffs or using their marks. For instance, PRO could have identified ASTM's Standard Specification for Structural Steel as the "standard adopted by 24 C.F.R. Part 200" rather than ASTM A36. But it did not.

*Second*, as this Court, the D.C. Circuit, and even PRO have acknowledged, PRO's use of Plaintiffs' trademark logos goes beyond what is reasonably necessary to identify Plaintiffs' Works. *See ASTM II*, 896 F.3d at 457 ("it may well be that PRO overstepped when it reproduced both ASTM's logo and its word marks but, as it told the district court, it is not wedded to using the logo" (citation omitted); *see also, e.g., Tabari*, 610 F.3d at 1181 (use of a stylized mark and logo was more use of the mark than necessary); *David's Bridal, Inc. v. House of Brides, Inc.*, No. 06 Civ. 5660 (SRC), 2010 WL 323306, at \*7 (D.N.J. Jan. 20, 2010) (use of design elements unnecessary). After remand, PRO claims to have redacted Plaintiffs' logos from the materials it posted. 2d Supp. SMF ¶ 21. This is not entirely true. PRO's postings of the NEC still use NFPA's trademarked NEC logo, *id.* ¶ 23, as does PRO's posting of ASTM D86-07, *id.* ¶ 24. Plaintiffs have a right to permanent injunctive relief to ensure PRO does not resume this practice.

*Third*, irrespective of any past, present, or future disclaimers, PRO's use of Plaintiffs' marks suggests that Plaintiffs endorse PRO's posted copies and that those copies are genuine versions of Plaintiffs' Works. PRO's disclaimers have been woefully insufficient. PRO originally posted the Works without any disclaimer; then, in response to this lawsuit, PRO posted text that this Court said "c[ould] hardly be called disclaimers at all." *ASTM I*, 2017 WL 473822, at \*23. While PRO has since revised its "disclaimers" on several occasions, litigation-driven

revisions are not a reason to deny summary judgment on liability for trademark infringement or to deny a permanent injunction. *See id.* (rejecting PRO’s trademark fair use argument based in part on the finding that PRO “did not begin using the disclaimer until 2015, after the start of this litigation”). In any event, as the D.C. Circuit noted, “the disclaimers PRO appends to many of its copies of the standards may well fail to adequately eliminate the possibility a consumer would assume sponsorship or endorsement by ASTM.” *ASTM II*, 896 F.3d at 457. And PRO “bears a ‘heavy burden to come forward with evidence sufficient to demonstrate that any [disclaimer] would significantly reduce the likelihood of consumer confusion.’” *Australian Gold, Inc. v. Hatfield*, 436 F.3d 1228, 1243 (10th Cir. 2006) (quoting *Home Box Office, Inc. v. Showtime/The Movie Channel Inc.*, 832 F.2d 1311, 1316 (2d Cir. 1987)). PRO cannot meet this burden.

PROs’ current disclaimers take three forms. The first appears on the cover page of PDF copies of Plaintiffs’ Works posted by PRO, as depicted below.



2d Supp. SMF ¶ 26. Considered in its star-spangled entirety, this cover page conveys a clear message—the document that follows is, “By Authority of the United States of America,” a

“Legally Binding Document,” and is “APPROVED” by at least the Executive Director of the Office of the Federal Register. The contradictory disclaimer—that the document is “Not Affiliated Or Authorized by ASTM or by the Government of the United States”—is barely perceptible amidst the surrounding regalia. Even if this disclaimer was somehow adequate (it is not), it resides only on the first page of PRO’s copies of Plaintiffs’ Works. *See id.* Anyone who downloads PRO’s pirated PDFs can delete this page—and thus the disclaimer—with a single click, and further disseminate disclaimer-less copies of Plaintiffs’ Works. Any disclaimer is insufficient to dispel confusion in these circumstances. *See, e.g., Int’l Kennel Club of Chi., Inc. v. Mighty Star, Inc.*, 846 F.2d 1079, 1093 (7th Cir. 1988) (affirming finding of inadequate disclaimer; “it would be difficult to ensure the use of disclaimers by [defendant’s] distributors since the defendants had no direct control over the distributors’ advertising. . . . Especially where the infringement in issue is a verbatim copying of the plaintiff’s name, we are convinced that that plaintiff’s reputation and goodwill should not be rendered forever dependent on the effectiveness of fingerprint disclaimers often ignored by consumers.”).

The second disclaimer appears “below the fold” of the Internet Archive webpage; a reader must scroll past the PDF copy of the standard—the material the reader came for—to see the disclaimer at all. *See* 2d Supp. SMF ¶ 27. This is insufficient. *See, e.g., TrafficSchool.com, Inc. v. Edriver Inc.*, 653 F.3d 820, 828 (9th Cir. 2011) (affirming ruling that disclaimer was insufficient to dispel confusion when consumers had to scroll to view).

Finally, PRO’s HTML-format copies of Plaintiffs’ standards—which are available for download on the Internet Archive Website—contain the following “disclaimer,” in the form of a “PREAMBLE (NOT PART OF THE STANDARD).”

PREAMBLE (NOT PART OF THE STANDARD)

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.

This document was prepared and posted by Public.Resource.Org (Public Resource), a U.S.-based charity certified under section 501(c)(3) of the Internal Revenue Code. Public Resource is not affiliated with, nor has it received authorization from, any standards development organization, for the posting of this document. Please note that the posting of this document has been subject to [litigation in U.S. federal court](#) and was done so by Public Resource for the non-commercial purpose of informing our fellow citizens about their rights and obligations under the laws of the United States.

END OF PREAMBLE (NOT PART OF THE STANDARD)

2d Supp. SMF 28. This “disclaimer”—which appears in approximately the same typeface and size as the rest of the document—is also inadequate. Indeed, anyone who downloads this document *to read the standard* is likely to ignore the section expressly labeled “NOT PART OF THE STANDARD.”

PRO’s redaction of Plaintiffs’ logos—and to be clear, PRO has not in all cases redacted Plaintiffs’ logos, *see* 2d Supp. SMF ¶¶ 23, 24—also fails to dispel confusion. As depicted below, PRO has, in some instances, “blacked out” Plaintiffs’ logos, but has typed Plaintiffs’ word marks, combined with the phrase “Logo Removed,” over the redacted area.



2d Supp. SMF ¶ 22. This technique only draws additional attention to the fact that Plaintiffs’ logos—which suggest that PRO’s substandard copies originate with Plaintiffs—appear on the standards PRO posts.

PRO intended to make the materials it posts look identical to Plaintiffs’ Works by applying Plaintiffs’ trademarks to the substandard versions of the Works PRO posted online. SMF ¶ 212. This is not fair use. Because PRO cannot meet its burden on any of the three required elements of nominative fair use, Plaintiffs are entitled to summary judgment on their claims for trademark infringement and false designation of origin.

**IV. PLAINTIFFS ARE ENTITLED TO A PERMANENT INJUNCTION**

The Court should permanently enjoin PRO from all reproduction, display, or distribution of Plaintiffs' standards and all use of Plaintiffs' trademarks. 17 U.S.C. § 502(a); 15 U.S.C. § 1116. This Court already granted an injunction once before, and it should do so again. Nothing in the D.C. Circuit's Order, which was aimed at fair use, bears on this Court's consideration of the four *eBay* factors, and no facts have changed that would counsel for a different result. An injunction is warranted because Plaintiffs will otherwise suffer irreparable harm, no other adequate remedy is available to compensate Plaintiffs, the harm to Plaintiffs outweighs any potential harm to PRO, and the public interest favors an injunction. *See eBay*, 547 U.S. at 391.

**A. Plaintiffs Will Suffer Irreparable Harm Without An Injunction**

PRO's unauthorized use of Plaintiffs' copyrights and trademarks threatens harm to (i) Plaintiffs' business model and standard-setting process; (ii) Plaintiffs' rights to exclude others from the use of their copyrighted Works; and (iii) Plaintiffs' reputations. Each of these three injuries is real yet hard to quantify—exactly the type of injury an injunction is meant to address.

**1. Economic Harm And Ramifications To Plaintiffs' Business Model**

Plaintiffs' expert economist, Mr. Jarosz, offered an unrebutted opinion on the direct economic harm Plaintiffs have suffered and are likely to continue to suffer. Plaintiffs generate significant revenue from sales of copyrighted standards or membership dues closely tied to their copyrighted standards. SMF ¶¶ 46-47, 106-08, 154. It is almost axiomatic that another party providing the same product to consumers will impact Plaintiffs' business—especially when provided for free. *See Presidio Components, Inc. v. Am. Technical Ceramics. Corp.*, 702 F.3d 1351, 1363 (Fed. Cir. 2012) (“Direct competition in the same market is certainly one factor



suggesting strongly the potential for irreparable harm without enforcement of the right to exclude.”).

But the magnitude of harm suffered to date is not the biggest risk. PRO has had the standards posted only on-and-off over recent years, and only while engaged in litigation that signals to the market that PRO’s provision of the standards may not be legal. The more significant risk is that, if PRO’s conduct goes unchecked, it will act as a signal to the market that the creation of unauthorized versions of standards is acceptable, which will lead to the proliferation of new versions of the Works on other sites, thereby compounding Plaintiffs’ harm over time as more people use the versions of the standards on PRO’s site or similar sites instead of purchasing authentic versions. SMF ¶ 254. Plaintiffs have already seen the impact of PRO’s infringement, as third parties have downloaded PRO’s infringing copies of ASTM’s Works and posted them on third-party websites: The online publisher Scribd.com currently hosts dozens of ASTM standards obtained from PRO. 2d Supp. SMF ¶ 106; SMF ¶ 249.

Further, as Mr. Jarosz explained in his expert report, a continuation of PRO’s infringement could force Plaintiffs to significantly alter their business models. Each of the Plaintiffs relies primarily on users of its standards to fund the development of the standards, rather than charging up-front fees to participate in the development process. Plaintiffs’ “back-loaded” business model means more stakeholders can participate in the standard-creation process so that the standards are balanced and represent a diversity of voices. SMF ¶¶ 257-58. Plaintiffs could be forced to significantly alter their business models to a more “front-loaded” system that charges for participation in the standard-creation process, which would preclude the participation of other stakeholders and impact the substance of the resulting standards. SMF ¶¶ 259-62.

**2. Harm To Plaintiffs’ Right To Exclude Caused By Repeat Infringement**

Another harm is to the Plaintiffs’ right to exclude others from use of their protected Works and trademarks, which is one of the fundamental tenets of intellectual property law. Repeated infringement threatens that right and justifies an injunction. *Breaking the Chain Found. v. Capitol Educ. Support, Inc.*, 589 F. Supp. 2d 25, 30 (D.D.C. 2008) (“Defendant’s continuing disregard for Plaintiff’s rights demonstrates that it will continue to infringe on Plaintiff’s rights, absent an injunction. This finding further justifies granting Plaintiff’s request for a permanent injunction.”); *TechnoMarine SA v. Giftports, Inc.*, 758 F.3d 493, 504 (2d Cir. 2014) (“[T]he critical question for a district court in deciding whether to issue a permanent injunction is whether there is a reasonable likelihood that the wrong will be repeated.” (citations omitted)).

When infringement is allowed to continue unchecked, a copyright owner essentially loses control of its intellectual property. And courts have found that this loss of control due to rampant infringement is irreparable—especially in an online environment where an infringing file can be shared ad nauseam with other users, thus compounding the harm. *See Metro-Goldwyn-Mayer Studios, Inc. v. Grokster*, 518 F. Supp. 2d 1197, 1218 (C.D. Cal. 2007) (“When digital works are distributed via the internet, every downloader who receives one of the copyrighted works is in turn capable of also transmitting perfect copies of the works. Accordingly, the process is potentially exponential rather than linear, threatening virtually unstoppable infringement of the copyright.”); *Groupe SEB USA, Inc. v. Euro-Pro Operating LLC*, 774 F.3d 192, 204–05 (3d Cir. 2014) (““Grounds for irreparable injury include loss of control of reputation, loss of trade, and loss of goodwill.””) (quoting *S & R Corp. v. Jiffy Lube Int’l, Inc.*, 968 F.2d 371, 378–79 (3d Cir. 1992)).

Here, PRO distributes downloadable, printable copies of the standards, which can then be taken from the Internet Archive and further shared anonymously and without any ability to trace the individuals or entities using the Works or their purpose in doing so. 2d Supp. SMF ¶ 104; SMF ¶¶ 247-48. And, as the Court noted in its earlier ruling granting an injunction in this case, there is no sign this conduct will end absent an injunction. *See ASTM I*, 2017 WL 473822, at \*24. During the course of this litigation, PRO has continued to post additional standards owned by Plaintiffs, and PRO has indicated that it has no intention of stopping its conduct absent intervention from the Court. 2d Supp. SMF ¶ 110. These facts warrant an injunction so that Plaintiffs can regain control of their copyrights and trademarks and do not need to bring a damages lawsuit for each and every standard that is posted.

### **3. Harm To Plaintiffs' Reputations**

Plaintiffs also have a right to protect their reputations. Indeed, courts have recognized that using another's trademark will result in irreparable harm because it causes the trademark owner to lose control of the goodwill associated with its mark. *Hanley-Wood LLC v. Hanley Wood LLC*, 783 F. Supp. 2d 147, 151 (D.D.C. 2011); *Breaking the Chain Found.*, 589 F. Supp. 2d at 30. Here, "Plaintiffs have spent decades establishing the goodwill associated with their names and logos, which the public associates with their high quality work." SMF ¶ 245 (citing Jarosz Rep. ¶ 151). Allowing PRO to publish inferior versions compromises that goodwill.

This risk is not just theoretical. PRO's lax quality control standards, SMF ¶¶ 199-200, resulted in PRO postings with errors that significantly altered the utility of standards, including an error in an NFPA standard which mistook the letter "M" (an abbreviation for meters) to the letters "I" and "N" (an abbreviation for inches), SMF ¶¶ 219 (Pauley Decl. 118-8 at ¶ 54). These errors are still in the versions PRO posts. 2d Supp. SMF ¶¶ 14-18. Such carelessness poses a serious risk to Plaintiffs' reputations as creators of high-quality technical standards.

**B. Remedies Available At Law Are Inadequate**

A permanent injunction should also be granted because there is no other appropriate remedy. In cases where money damages are difficult to quantify or a defendant is unable to pay money damages, the lack of alternative remedy makes an injunction appropriate. *Fox Television Stations, Inc. v. Filmon X LLC*, 966 F. Supp. 2d 30, 50 (D.D.C. 2013). For instance, in *Fox Television*, the Court found an injunction warranted where damages were “neither easily calculable, nor easily compensable,” and the Court made particular note that the defendant “would likely be unable to pay statutory copyright damages of \$150,000 per work if Plaintiffs prevail.” *Id.* The same considerations apply here.

The harms caused by PRO cannot be readily quantified. First, the types of harm sustained by Plaintiffs—including harm to Plaintiffs’ goodwill and impact on Plaintiffs’ business models—are inherently difficult to quantify. *See Bell Helicopter Textron Inc. v. Airbus Helicopters*, 78 F. Supp. 3d 253, 274-75 (D.D.C. 2015) (“losses to . . . customer base and reputation defy attempts at valuation, and are unlikely to be remedied through a simple damages calculation” (internal citations omitted)). Second, the amount of harm cannot be determined. Because PRO posted Plaintiffs’ Works in a manner that allows them to be easily copied, shared, downloaded, or printed by any member of the public, it is impossible to know how many infringing copies or illegal distributions have been made. 2d Supp. SMF ¶ 92. PRO’s posted versions of Plaintiffs’ standards, on its own site and, again, on the Internet Archive, have been downloaded tens of thousands of times. *Id.* ¶ 99; SMF ¶¶ 241-44. PRO admits it generally has no idea how the Works accessed from its website are ultimately used or by whom. SMF ¶¶ 247-48; 2d Supp. SMF ¶ 104. Under these facts, actual monetary damages are impossible to assess.

In the absence of calculable damages, a copyright plaintiff could elect to receive statutory damages available under the Copyright Act. However, any effort to recover statutory damages

would be futile since the damages award would far outweigh PRO's assets. This case involves hundreds of copyrighted works, and statutory damages can range up to \$150,000 *per work* in cases of willful infringement. 17 U.S.C. § 504(c). But PRO's financial documents reveal that PRO has limited assets and, as a self-described "charity," is dependent on fundraising. SMF ¶ 272-73; 2d Supp. SMF ¶ 111. PRO simply does not have the ability to pay damages.

Notably, PRO does not dispute that monetary damages are inadequate in this case. Instead, PRO's position appears to be that there should be no remedy at all, irrespective of how the copyright and trademarks issues are resolved. When asked at the initial summary judgment hearing what would be an appropriate remedy, counsel for PRO responded: "I am not able to say." 2d Supp. SMF ¶ 112. Put simply, there is no adequate remedy but an injunction.

**C. The Balance Of Hardships Favors Issuing An Injunction**

In contrast to the financial and reputational harms Plaintiffs face, an injunction would cause no recognizable harm to PRO, so there is nothing to balance against the harms caused to Plaintiffs.

PRO has admitted that there will be no financial harm if PRO's posting of standards is halted. Specifically, Mr. Malamud testified:

Q: If Public Resource was unable to continue to post the standards incorporated by reference on its website, what impact, if any, [would] that have on Public Resource's financial ability to survive long term?

A: Probably none.

Q: Can you identify any harm that would be suffered by Public Resource if it was precluded [from] posting standards incorporated by reference on its website?

A: THE WITNESS: We put a tremendous amount of effort in—into this and one hates to [have] wasted that—that effort.

Q: Anything else that you can think of?

A: No.

SMF ¶ 277 (C. Malamud Dep. at 219:22-220:17).

PRO's "wasted" effort expended in committing infringement is not a legally cognizable harm. The law is clear that PRO cannot claim an equitable interest in its ability to undertake infringing activity. *Fox Television Stations*, 966 F. Supp. 2d at 51; *Triad Sys. Corp. v. Se. Express Co.*, 64 F.3d 1330, 1338 (9th Cir. 1995) (defendant "cannot complain of the harm that will befall it when properly forced to desist from its infringing activities."); *Concrete Mach. Co. v. Classic Lawn Ornaments, Inc.*, 843 F.2d 600, 612 (1st Cir. 1988) (harm from ceasing infringement "merits little equitable consideration").

**D. The Public Interest Favors Issuing An Injunction.**

It is undisputed that Plaintiffs do important work that serves the public good. The standards at issue are devoted to issues of great importance to the public, including fire safety and energy efficiency. In fact, Mr. Malamud readily admits that the NFPA "does amazing work and saves lives," that he is a "big fan of ASTM . . . and we need to continue to have standards in that area," and that "ASHRAE Standard 90.1 is an important standard." SMF ¶¶ 164-67. It is also widely accepted that these standards serve the public good by aiding government agencies that would not otherwise have the resources or technical expertise to fulfill their regulatory duties as well as they do currently. SMF ¶ 266 (citing Jarosz Rep. at ¶¶ 52-56; 164).

Unfortunately, as Mr. Malamud concedes, "making standards more freely available . . . potentially poses a challenge to the current business models of the standards development of some standards development organizations." SMF ¶ 255. Indeed, Mr. Jarosz explained in detail in his unrebutted expert report the various ways that Plaintiffs' business models (and the quality of their standards) are likely to change in the face of unfettered infringement. SMF ¶¶ 259-62. That result is not surprising or unique to this case. Courts in this

circuit have recognized that the very policy considerations underpinning our copyright system mandate that the public interest is best served by protecting the creative work of copyright holders like Plaintiffs so that they will continue to create such works. *See Fox Television Stations*, 966 F. Supp. 2d at 51 (“the public interest can only be served by . . . preventing the misappropriation of skills, creative energies, and resources which are invested in the protected work”) (internal citations omitted).

In contrast to the undisputed public interest served by Plaintiffs’ standards, PRO cannot identify any adverse public impact that would arise if an injunction is granted. PRO can point to no actual lack of access to Plaintiffs’ Works at issue in this litigation because Plaintiffs already provide free read-only access to the standards on their websites. 2d Supp. SMF ¶ 85. Finally, due to rulings in this case, PRO removed its public postings of Plaintiffs’ standards from the internet in late 2015 and did not repost them until after the D.C. Circuit’s July 2018 ruling remanding the case. *Id.* ¶¶ 11-12. PRO can point to no harm that befell the public as a result of PRO’s postings being offline for more than two and a half years.

All available evidence suggests that the public’s interest is best served by granting Plaintiffs’ request for an injunction.

### **CONCLUSION**

For the foregoing reasons, the Court should grant summary judgment in favor of Plaintiffs on their copyright infringement and trademark infringement claims and should permanently enjoin PRO from infringing Plaintiffs’ copyrights and trademarks.

Dated: October 7, 2019

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on October 7, 2019, the foregoing document was filed with the clerk of this Court via the CM/ECF system and served on counsel of record via email, including:

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Respectfully submitted,

*/s/ J. Kevin Fee*

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J. Kevin Fee

Case 1:13-cv-01215-TSC Document 201 Filed 10/07/19 Page 1 of 62

**PLAINTIFFS' SECOND SUPPLEMENTAL STATEMENT  
OF MATERIAL FACTS IN SUPPORT OF THEIR  
SECOND MOTION FOR SUMMARY JUDGMENT**

**REDACTED**

**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>
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**PLAINTIFFS’ SECOND SUPPLEMENTAL STATEMENT OF MATERIAL FACTS IN  
SUPPORT OF THEIR SECOND MOTION FOR SUMMARY JUDGMENT**

Pursuant to the Local Rule 7(h), 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, “Plaintiffs”) hereby submit, in support of their Second Motion for Summary Judgment, this Second Supplemental Statement of Material Facts<sup>1</sup> as to which there is no genuine issue to be tried.

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<sup>1</sup> Plaintiffs filed an original Statement of Material Facts (Dkt. 118-2) (“SMF”) and Supplemental Statement of Material Facts (155-1). The facts contained in this Second Supplemental Statement of Material Facts are additional to the already-developed record. Plaintiffs also have relied on and cited to their prior statements of material facts in support of the Second Motion for Summary Judgment.

**TABLE OF CONTENTS**

I. Plaintiffs Own Copyrights In The 217 Standards At Issue In This Motion.....1

II. PRO’s Ongoing Infringement of Plaintiffs’ Works .....2

    A. PRO’s Postings To Internet Archive After Remand From The D.C. Circuit .....2

    B. PRO Did Not Fix The Errors In Its Versions of Plaintiffs’ Standards.....3

    C. PRO Continues To Use Plaintiffs’ Marks.....4

    D. PRO’s Changes To Its “Disclaimers” Are Insufficient.....6

III. PRO’s Failure To Follow The D.C. Circuit’s Decision.....7

    A. PRO Essentially Did Nothing In Response To The D.C. Circuit’s Decision .....7

    B. PRO Has Failed To Identify Correct Citations That Incorporate The  
    Works By Reference .....8

    C. PRO Copies And Distributes Plaintiffs’ Works, Regardless Of Whether  
    They Are Essential To Comply With Any Legal Duty.....22

IV. PRO’s Conduct Harms Plaintiffs’ Actual And Potential Markets; And An  
Injunction Is Necessary.....44

    A. Plaintiffs Distribute Their Standards, Provide Free Read-Only Access,  
    And Other Informational Resources .....44

    B. PRO’s Posting Of Its Versions Of Plaintiffs’ Works Online Is  
    Substitutional And Harmful.....47

    C. PRO Does Not Make Use of Internet Archive’s Features That Would  
    Protect Plaintiffs’ Standards .....56

    D. Injunctive Relief Is Necessary .....56

**I. PLAINTIFFS OWN COPYRIGHTS IN THE 217 STANDARDS AT ISSUE IN THIS MOTION<sup>2</sup>**

ASTM's Copyrighted Works

1. ASTM has obtained copyright registration certificates that cover its 191 standards at issue in this motion. Declaration of Jane W. Wise, filed concurrently herewith, (“Wise Decl.”) ¶¶ 2, 31-149, Exs. 30-148; Declaration of Thomas O’Brien, previously filed at Dkt. 118-7, (“O’Brien Decl.”) ¶¶ 5-12, Exs. 1-4.

2. Specifically, ASTM is the claimant for the works appearing in Annex A (collectively, the “ASTM Standards”). Wise Decl. ¶¶ 2, 31-150, Exs. 30-149; O’Brien Decl. ¶¶ 5-12, Exs. 1-4.

3. Each and every standard, edition, title, year of the Annual ASTM Book of Standards (“BOS”), and copyright registration number appearing in Annex A is true and correct as shown in the corresponding exhibits. Wise Decl. ¶¶ 2-150, Exs. 1-149; O’Brien Decl. ¶¶ 5-12, Exs. 1-4.

4. The specified edition of each ASTM Standard identified in Annex A was originally published in the BOS (identified by year) in the corresponding row of Annex A. Wise Decl. ¶¶ 2-33, 35-57, 59-137, 139-150, Exs. 1-32, 34-56, 58-136, 138-149; O’Brien Decl. ¶¶ 7-12, Exs. 3-4.

5. Each BOS identified in Annex A is the subject of the copyright registration identified in the corresponding row of Annex A. Wise Decl. ¶¶ 2-33, 35-57, 59-137, 139-150, Exs. 1-32, 34-56, 58-136, 138-149; O’Brien Decl. ¶¶ 7-12, Exs. 3-4.

6. For each ASTM Standard where no BOS is identified, the standard is the subject of the copyright registration identified in the corresponding row of Annex A. Wise Decl. ¶¶ 34, 58, 138, Exs. 33, 57, 137; O’Brien Decl. ¶¶ 5-6, Exs. 1-2.

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<sup>2</sup> The 217 standards at issue in Plaintiffs’ motion for summary judgment are collectively referred to herein as the “Works” or “Plaintiffs’ Works.”

7. The registrations whose numbers appear in bold Annex A were effective within 5 years of the date of first publication identified in the registration certificate. Wise Decl. ¶¶ 2-33, 35-57, 59-65, 67-149, Exs. 1-32, 34-56, 58-148; O'Brien ¶¶ 7-11, Exs. 3-4.

8. The published version of each ASTM Standard includes a copyright notice alerting the public to the fact that the copyright is owned by ASTM. O'Brien Decl. ¶ 11.

#### NFPA's Copyrighted Works

9. NFPA has obtained copyright registration certificates for its 23 standards at issue in this motion, each within five years of publication. Declaration of Dennis J. Berry, previously filed at Dkt. 118-3, ("Berry Decl.") ¶¶ 2-3, Exs. A-B; Supplemental Declaration of James Pauley Declaration, filed concurrently herewith, ("Supp. Pauley Decl.") ¶¶ 6-24, Exs. W-OO (certificates of registration).

#### ASHRAE's Copyrighted Works

10. ASHRAE has obtained copyright registration certificates for its 3 standards at issue in this motion, each within five years of publication. Declaration of Stephanie Reiniche, previously filed at Dkt. 118-10, ("Reiniche Decl.") ¶ 15, Exs. 3-5.

## **II. PRO'S ONGOING INFRINGEMENT OF PLAINTIFFS' WORKS**

### **A. PRO's Postings To Internet Archive After Remand From The D.C. Circuit**

11. Following the D.C. Circuit remand in July 2018, Defendant Public.Resource.Org ("PRO") "reposted the standards at issue . . . to the Internet Archive" website. Wise Decl. ¶ 165, Ex. 164 at Interrog. 22.

12. PRO had previously, at the Court's suggestion (and prior to the injunction), removed Plaintiffs' standards from its website and the Internet Archive website in November 2015. SMF ¶ 186.

**B. PRO Did Not Fix The Errors In Its Versions of Plaintiffs' Standards**

13. During his deposition, Mr. Malamud claimed that if he were notified of any mistakes, he would do a rigorous quality assurance check and correct any mistakes. SMF ¶ 217 (citing Declaration of Jordana Rubel, previously filed at Dkt. 118-12, ("Rubel Decl."). ¶ 6, Ex. 3 (C. Malamud Dep. at 140:19-25)).

14. Well over three years have passed since Plaintiffs notified Mr. Malamud of errors in his postings. Nonetheless, PRO never corrected most of these mistakes, instead reposting versions of standards which he previously admitted were not acceptable. SMF ¶ 216 (citing Rubel Decl. ¶ 6, Ex. 3 (C. Malamud Dep. at 140:19-141:6)).

15. For example, during Mr. Malamud's deposition, Plaintiffs notified him that the HTML version of ASTM D86-07 he had posted contained a number of errors, including text and numbers that differ from the information in the authentic versions of Plaintiffs' standards. SMF ¶ 215 (citing Rubel Decl. ¶ 6, Ex. 3 (C. Malamud Dep. at 127:4-139:8)).

16. PRO has not fixed those errors to its HTML version of ASTM D86-07. Wise Decl. ¶ 166, Ex. 165.

17. Plaintiffs also alerted PRO to a number of errors in the HTML posting of the 2011 edition of the National Electrical Code ("NEC") that distort the meaning of substantive provisions of the standard that were written to protect human safety and prevent property damage, including but not limited to erroneously using the letter "M" (an abbreviation for meters) rather than the letters "I" and "N" (an abbreviation for inches). SMF ¶ 219 (citing Declaration of James Pauley filed at Dkt. 118-8, ("Pauley Decl.") ¶ 54).

18. PRO has not reposted its version of the 2011 NEC in HTML form, but almost all of those precise errors remain in its Full Text posting of the 2011 NEC. Supp. Pauley Decl. ¶ 39; Wise Decl. ¶ 167, Ex. 166.



19. PRO has not made meaningful changes to the process it previously used to rekey text, convert graphics, reset mathematical formulas or otherwise make change its quality control measures. Wise Decl. ¶ 165, Ex. 164 at Interrog. 22.

20. PRO acknowledges that Plaintiffs (or governmental authorities), not PRO, are the definitive source for accurate copies of the Plaintiffs' standards by directing readers "to check with the standards organizations or governmental authorities for further information and access to definitive versions of these important laws." *See, e.g.*, Wise Decl. ¶ 168, Ex. 167.

**C. PRO Continues To Use Plaintiffs' Marks**

21. PRO stated that it removed all of Plaintiffs' logos from PRO's copies of Plaintiffs' Works. Wise Decl. ¶ 165, Ex. 164 at Interrog. 22.

22. As depicted below, PRO has in some instances "blacked out" Plaintiffs' logos, but has typed Plaintiffs' word marks, combined with the phrase "Logo Removed," over the redacted area.



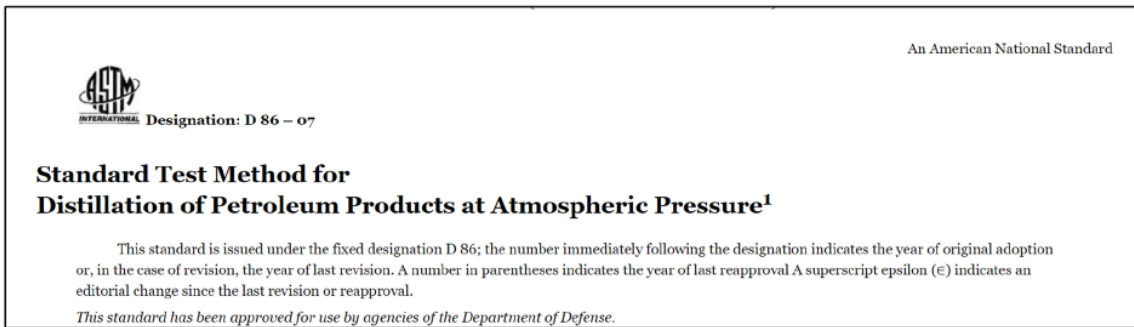
Wise Decl. Wise Decl. ¶ 153, Ex. 152 at 180.

23. However, Internet Archive postings show that not all of Plaintiffs' logos have been removed, and PRO has not removed Plaintiffs' word marks. For example, PRO has not removed the NEC logo for at least the 2011 and 2014 editions of the NEC or any of the word marks:



Wise Decl. ¶ 169, Ex. 168; Supp. Pauley Decl. ¶ 32.

24. Similarly, PRO’s Internet Archive postings continue in some instances to display the ASTM Logo, as depicted below.

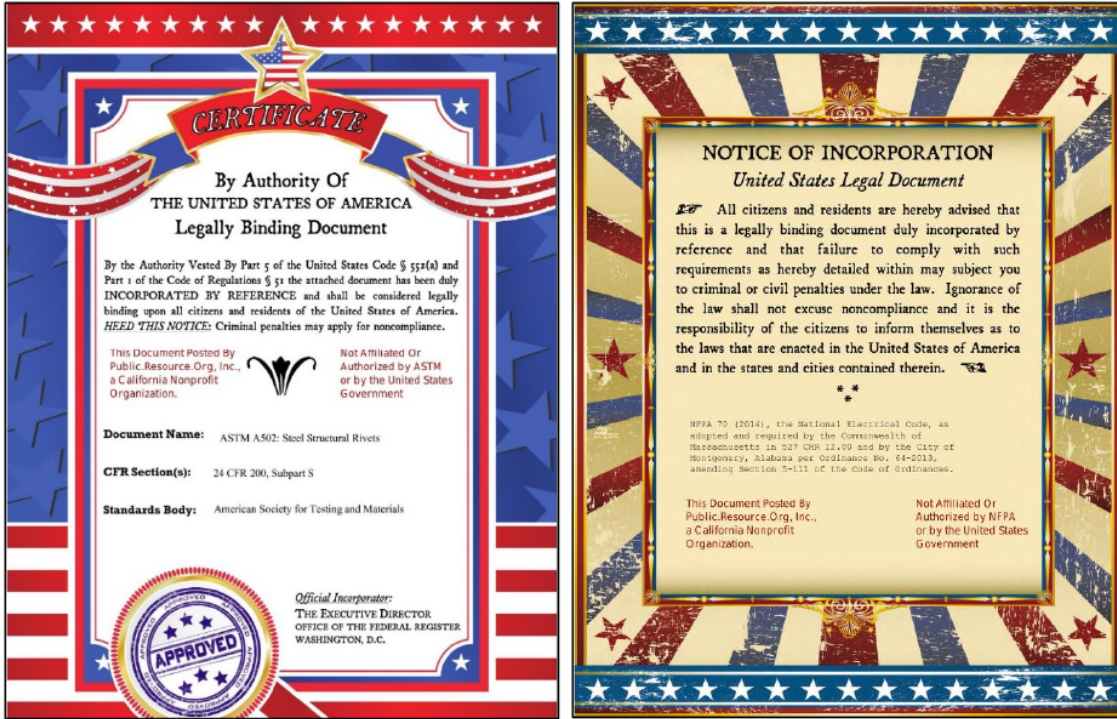


Wise Decl. ¶ 166, Ex. 165.

25. And even where PRO has redacted the ASTM logo, PRO has not in any instance redacted the ASTM word mark. Wise Decl. ¶ 153, Ex. 152.

**D. PRO’s Changes To Its “Disclaimers” Are Insufficient**

26. PRO’s “disclaimers” take three forms. The first appears on the cover page of PDF copies of Plaintiffs’ Works posted by PRO, as depicted below.



Wise Decl. Wise Decl. ¶ 153, Ex. 152 at 180; Wise Decl. ¶ 168, Ex. 167 at 6.

27. The second disclaimer appears “below the fold” of the Internet Archive webpage; a reader must scroll past the PDF copy of the standard to see the disclaimer at all. Wise Decl. ¶ 168, Ex. 167 at 6.

28. Finally, PRO’s HTML-format copies of Plaintiffs’ standards—which are available for download on the Internet Archive Website—contain the following “disclaimer,” in the form of a “PREAMBLE (NOT PART OF THE STANDARD)”:

PREAMBLE (NOT PART OF THE STANDARD)

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.

This document was prepared and posted by Public.Resource.Org (Public Resource), a U.S.-based charity certified under section 501(c)(3) of the Internal Revenue Code. Public Resource is not affiliated with, nor has it received authorization from, any standards development organization, for the posting of this document. Please note that the posting of this document has been subject to [litigation in U.S. federal courts](#) and was done so by Public Resource for the non-commercial purpose of informing our fellow citizens about their rights and obligations under the laws of the United States.

END OF PREAMBLE (NOT PART OF THE STANDARD)

Wise Decl. ¶ 166, Ex. 165.

29. This “disclaimer” appears in approximately the same typeface and size as the rest of the document. *Id.*

### **III. PRO’S FAILURE TO FOLLOW THE D.C. CIRCUIT’S DECISION**

#### **A. PRO Essentially Did Nothing In Response To The D.C. Circuit’s Decision**

30. Plaintiffs’ interrogatories asked PRO to identify the authority and portions of standards that it contended impose binding legal obligations; but PRO did not do any analysis to determine “with specificity each portion(s) of the Standard at Issue that PRO asserts imposes a legal obligation on an individual or entity.” *See generally* Wise Decl. ¶ 165, Ex. 164 at Interrogs. 17-21.

31. PRO disavowed any obligation to do any analysis of the standards to support its fair use defense: “The entirety of each standard listed [at issue in this litigation] is incorporated by reference into the law. Public Resource is not an attorney and does not provide legal advice, and cannot provide advice regarding what legal obligations an individual or entity may face as a result of hundreds of different federal, state, and local laws.” Wise Decl. ¶ 165, Ex. 164 at Interrog. 19.

32. In response to Plaintiffs’ interrogatories regarding PRO’s basis for copying and distributing every portion of Plaintiffs’ standards “verbatim,” PRO explained that “[t]he entirety of each standard [at issue in this litigation] is incorporated by reference into the law, and it is therefore necessary to reproduce the entire standard verbatim in order to accurately state what the law is.” Wise Decl. ¶ 165, Ex. 164 at Interrog. 21.<sup>3</sup>

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<sup>3</sup> Standards often incorporate other standards by reference. *See infra* ¶ 69. PRO’s answer does not explain how it would distinguish between standards that are incorporated by reference directly by a regulation and the numerous additional standards that are incorporated by reference within the standards of other related standards.

**B. PRO Has Failed To Identify Correct Citations That Incorporate The Works By Reference**

Incorrect Citations re: ASTM's Standards

33. ASTM standards are reviewed on a 5 year schedule. Declaration of James Thomas, previously filed at Dkt. 118-11, ("James Thomas Decl.") ¶ 33. ASTM publishes an Annual Book of ASTM Standards that is composed of a number of volumes and includes the then-current version of each of its standards. O'Brien Decl. ¶ 7.

34. Each ASTM standard has a unique designation comprised of a capital letter classification A-G which designates the general classification of the standard (*e.g.*, standards beginning with "A" address ferrous metals). O'Brien Decl. Ex. 3 at 1349.

35. In each serial designation, the number following the dash indicates the year of original adoption as a standard, or the year of the standard's last revision. *Id.* Standards that have been reapproved without change are indicated by the year of last reapproval in parentheses as part of the designation number (*e.g.*, C5-79 (1997) indicates that C5 was reapproved in 1997). *Id.* A letter following this number indicates more than one revision during that year (*e.g.*, A106-04b indicates the second revision in 2004 to A106). *Id.* A superscript epsilon indicates an editorial change since the last revision or reapproval (*e.g.*, A36-97a<sup>ε1</sup> indicates the first editorial revision of the 1997 version of A36). *Id.* If a standard is written in acceptable metric units, the metric version is indicated by the letter M (*e.g.*, A369M-92 indicates that this version of A389 contains metric units). *Id.* When ASTM publishes standards in metric and inch-pound units it identifies the standard with a dual designation (*e.g.*, ASTM A369/A369M-92 identifies a dual standard). *Id.* Regulations like the Code of Federal Regulations typically identify ASTM standards according to this specific designation number. For example, 40 C.F.R. § 114.600 specifies the edition of

the ASTM standards incorporated by reference in 46 C.F.R. § 119.440, including B122/B122M-95 and B96-93. *See* 40 C.F.R. § 114.600.

36. As discussed in detail below, PRO has reproduced and displayed at least 92 standards that have not been incorporated by the regulation(s) it identifies in its cover sheets:

- a. **ASTM A36 (1977a<sup>e</sup>):** PRO identifies 24 C.F.R. § 200 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1. However, 24 C.F.R. § 200 does not reference this standard.
- b. **ASTM A36/A36M (1997a<sup>e1</sup>):** PRO identifies 46 C.F.R. § 160.035-3(b)(2) as the incorporating by reference regulations. Wise Decl. ¶ 153, Ex. 152 at 7. However, 46 C.F.R. § 160.035 was removed and reserved. *See* 76 FR 62962, 62975, Oct. 11, 2011.
- c. **ASTM A82 (1979):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00092094; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 12. However, 24 C.F.R. § 200, Subpart S does not reference this standard.
- d. **ASTM A106/A106 M (2004b):** PRO identifies 49 C.F.R. § 192.113 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00079099; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19. However, 49 C.F.R. § 192.113 references ASTM A106, not ASTM A106/A106 M (2004b). And 49 C.F.R. § 192.7, which identifies standards incorporated by reference, references the 2010 version of ASTM A106/A106 M, not the 2004b version.
- e. **ASTM A184 (1979):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. ¶ 153, Ex. 152 at 18. However, 24 C.F.R. § 200, Subpart S does not reference this standard.
- f. **ASTM A185 (1979):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00080317; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 23. However, 24 C.F.R. § 200, Subpart S does not reference this standard.
- g. **ASTM A203/A203 M (1997):** PRO identifies 46 C.F.R. § 54.05-20(b) as the incorporating by reference regulation. ¶ 153, Ex. 152 at 31. However, 46 C.F.R. § 54.05-20(b) references ASTM A 203/A 203M-97 (Reapproved 2007)<sup>e1</sup>, not ASTM A203/A203 M (1997).

- h. **ASTM A242 (1979):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00082342; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 36. However, 24 C.F.R. § 200, Subpart S does not reference this standard.
- i. **ASTM A285 (1978):** PRO identifies 10 C.F.R. § 440 Appendix A and 24 C.F.R. § 200 Appendix A as the incorporating by reference regulations. Wise Decl. ¶ 153, Ex. 152 at 40. However, 10 C.F.R. § 440 Appendix A and 24 C.F.R. 200 Appendix A do not reference this standard.
- j. **ASTM A307 (1978e):** PRO identifies 24 C.F.R. § 200, Subpart S and 46 C.F.R. 56.25-20(b) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00082371; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 45. However, 24 C.F.R. § 200, Subpart S does not reference this standard, and 46 C.F.R. § 56.25-20(b) references the 1997 version of ASTM A307, not the 1978<sup>e</sup> version.
- k. **ASTM A325 (1979):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00082401; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 51. However, 24 C.F.R. § 200, Subpart S does not reference this standard.
- l. **ASTM A370-77<sup>e2</sup>:** PRO identifies 49 C.F.R. § 179.102-1(a)(1) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 62. However, 49 C.F.R. § 179.102-1(a)(1) incorporates ASTM A370-94 not ASTM A370-77<sup>e2</sup>. 49 C.F.R. § 179.102-1(a)(1).
- m. **ASTM A441-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 120. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A441-79.
- n. **ASTM A449-78a:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 124. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A449-78a.
- o. **ASTM A475-78(1984)<sup>e1</sup>:** PRO identifies 7 C.F.R. § 1755.370(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 131. However, 7 C.F.R. § 1755.370(b) incorporates ASTM A476-78, not ASTM A475-78(1984)<sup>e1</sup>.
- p. **ASTM A490-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00088099; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶

153, Ex. 152 at 138. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A490-79.

- q. **ASTM A496-78:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 148. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A496-78.
- r. **ASTM A497-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 155. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A497-79.
- s. **ASTM A500-78:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 163. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A500-78.
- t. **ASTM A501-76:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00089127; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 171. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A501-76.
- u. **ASTM A502-76:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00090524; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 180. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A502-76.
- v. **ASTM A514-77:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 186. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A514-77.
- w. **ASTM A539-90a:** PRO identifies 24 C.F.R. § 3280.705(b)(4) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00091622; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19. However, 24 C.F.R. § 3280.705(b)(4) incorporates ASTM C539-99 not ASTM C539-90a. 24 C.F.R. § 3280.705(b)(4).
- x. **ASTM A570-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00091642; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 197. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A570-79.



- y. **ASTM A572-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Decl. ¶ 153, Ex. 152 at 202. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A572-79.
- z. **ASTM A588-79a:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 207. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A588-79a.
- aa. **ASTM A611-72(1979):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 211. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A611-72(1979).
- bb. **ASTM A615-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00091848; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 216. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A615-79.
- cc. **ASTM A616-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 224. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A616-79.
- dd. **ASTM A617-79:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 232. However, 24 C.F.R. § 200, Subpart S does not reference ASTM A617-79.
- ee. **ASTM B21-83b:** PRO identifies 46 C.F.R. § 56.60-2 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 246. However, 46 C.F.R. § 56.60-2 incorporates B21-96. Additionally, 46 C.F.R. § 56.60-2 only incorporates this standard with respect to certain copper alloys addressed in B21.
- ff. **ASTM B85-84:** PRO identifies 46 C.F.R. § 56.60-2 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 252. However, 46 C.F.R. § 56.60-2 incorporates B85-96. 46 C.F.R. § 56.60-2. Additionally, 46 C.F.R. § 56.60-2 only incorporates one table within ASTM B85-96—table X-2—and states that “[t]ension tests shall be performed to determine tensile strength, yield strength, and elongation” in accordance with the minimum value in X-2. *Id.* The remainder of the standard is unnecessary to determine the minimum value in X-2. *Id.* Table X-2 also contains values for sheer strength and fatigue strength that are unnecessary to understand the minimum value for the required tension tests. *Id.*

- gg. **ASTM B580-79:** PRO identifies 49 C.F.R. § 171.7 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00093063; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 318. However, 49 C.F.R. § 171.7 incorporates ASTM B580-79 reapproved in 2000, not ASTM B580-79. 49 C.F.R. § 171.7.
- hh. **ASTM C5-79(1997):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00093990; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 330. However, 24 C.F.R. § 200, Subpart S does not reference ASTM C5-79.
- ii. **ASTM C150-99a:** PRO identifies 30 C.F.R. § 250.198 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 334. However, 30 C.F.R. § 250.198 incorporates ASTM C150-07, not ASTM C150-99a. 30 C.F.R. § 250.198.
- jj. **ASTM C330-99:** PRO identifies 30 C.F.R. § 250.901(a)(18) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00093937; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 378. However, 30 C.F.R. § 250.901(a)(18) incorporates ASTM C330-05, not ASTM C330-99. 30 C.F.R. § 250.901(a)(18).
- kk. **ASTM C509-84:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 384. However, 24 C.F.R. § 200, Subpart S does not reference ASTM C509-84.
- ll. **ASTM C516-80(1996)<sup>e1</sup>:** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00094023; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 392. However, 24 C.F.R. § 200, Subpart S does not reference ASTM C516-80(1996)<sup>e1</sup>.
- mm. **ASTM C549-81(1995)<sup>e1</sup>:** PRO identifies 10 C.F.R. § 440, Appendix A as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00094157; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 411. However, 10 C.F.R. § 440, Appendix A incorporates ASTM C549-81 reapproved in 1986, not ASTM C549-81(1995)<sup>e1</sup>. 10 C.F.R. § 440, Appendix A.
- nn. **ASTM C564-70(1982):** PRO identifies 24 C.F.R. § 3280.611(d)(5)(iv) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 417. However, 24 C.F.R. § 3280.611(d)(5)(iv) incorporates ASTM C564-88 not ASTM C564-70(1982). 24 C.F.R. § 3280.611(d)(5)(iv).
- oo. **ASTM D86-07:** PRO identifies 40 C.F.R. § 1065.710 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106152; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 423.

However, 40 C.F.R. § 1065.710 incorporates ASTM D86-12, not ASTM D86-07. 40 C.F.R. § 1065.710.

- pp. **ASTM D512-89(1999):** PRO identifies 40 C.F.R. § 136.3(a) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00104757; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 466. However, 40 C.F.R. § 136.3(a) incorporates ASTM D512a-04, D512b-04, and D512c-04 not ASTM D512-89(1999). 40 C.F.R. § 136.3(a).
- qq. **ASTM D814-95:** PRO identifies 40 C.F.R. § 1051.245(e)(1) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00105881; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 493. However, 40 C.F.R. § 1051.245(e)(1) does not incorporate ASTM D814-95. 40 C.F.R. § 1051.245(e)(1).
- rr. **ASTM D975-07:** PRO identifies 40 C.F.R. § 1065.710 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 517. However, 40 C.F.R. § 1065.710 incorporates ASTM D975-13a, not ASTM D975-07. 40 C.F.R. § 1065.710.
- ss. **ASTM D1246-95(1999):** PRO identifies 40 C.F.R. § 136.3(a), Table IB as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 546. However, 40 C.F.R. § 136.3(a), Table IB incorporates ASTM D1246-05, not ASTM D1246-95(1999). 40 C.F.R. § 136.3(a), Table IB.
- tt. **ASTM D1481-93(1997):** PRO identifies 40 C.F.R. § 136.3(a), Table IC as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 599. However, 40 C.F.R. § 136.3(a), Table IC does not incorporate ASTM D1481-93(1997). 40 C.F.R. § 136.3(a), Table IC.
- uu. **ASTM D1518-85 (1998)<sup>e1</sup>:** PRO identifies 46 C.F.R. § 160.174-17(f) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00095007; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 606. However, 46 C.F.R. § 160.174-17(f) incorporates ASTM D1518-85 reapproved in 1990, not ASTM D1518-85 (1998)<sup>e1</sup>. 46 C.F.R. § 160.174-17(f).
- vv. **ASTM D1785-86:** PRO identifies 46 C.F.R. § 56.01-2 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 661. However, 46 C.F.R. § 56.01-2 does not reference ASTM D1785-86. 46 C.F.R. § 56.01-2.
- ww. **ASTM D1890-96:** PRO identifies 40 C.F.R. § 136.3(a) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 678. However, 40 C.F.R. § 136.3(a) does not reference ASTM D1890-96. 40 C.F.R. § 136.3(a).

- xx. **ASTM D2036-98:** PRO identifies 40 C.F.R. § 136.3(a), Table 1B as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 742. However, 40 C.F.R. § 136.3(a), Table 1B incorporates a different version of ASTM D2036. 40 C.F.R. § 136.3(a), Table 1B incorporates ASTM D2036-09(A) and (B), not ASTM D2036-98. 40 C.F.R. § 136.3(a), Table 1B.
- yy. **ASTM D2163-91 (1996):** PRO identifies 40 C.F.R. § 86.1313-94(f)(3) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 763. However, 40 C.F.R. § 86.1313-94 is reserved by 79 FR 23704 and does not reference ASTM D2163-91 (1996). 40 C.F.R. § 86.1313-94.
- zz. **ASTM D2986-95a (1999):** PRO identifies 40 C.F.R. § 86.1310-2007(b)(7)(i)(A) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 861. However, 40 C.F.R. § 86.1310-2007 is reserved by 79 FR 23704 and does not reference ASTM D2986-95a (1999). 40 C.F.R. § 86.1310-2007.
- aaa. **ASTM D3120-96:** PRO identifies 40 C.F.R. § 80.46(a)(3)(iii) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00103410; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 868. However, 40 C.F.R. § 80.46 incorporates a different version of ASTM D3120. 40 C.F.R. § 80.46 incorporates ASTM D3120-08, not ASTM D3120-96. 40 C.F.R. § 80.46.
- bbb. **ASTM D5257-97:** PRO identifies 40 C.F.R. § 136.3(a) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00104786; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1017. However, 40 C.F.R. § 136.3(a) incorporates ASTM D5257-11, not ASTM D5257-97. 40 C.F.R. § 136.3(a).
- ccc. **ASTM D5373-93 (1997):** PRO identifies 40 C.F.R. § 75, Appendix G as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00104803; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1025. However, 40 C.F.R. § 75, Appendix G incorporates a different version of ASTM D5373. 40 C.F.R. § 75, Appendix G incorporates ASTM D5373-02 (2007), not ASTM D5373-93 (1997). 40 C.F.R. § 75, Appendix G.
- ddd. **ASTM D5489-96a:** PRO identifies 16 C.F.R. § 423.8(g) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1031. However, 16 C.F.R. § 423.8(g) incorporates ASTM D5489-96c, not ASTM D5489-96a. 16 C.F.R. § 423.8(g).
- eee. **ASTM E23-82:** PRO identifies 46 C.F.R. § 56.50-105(a)(1)(ii) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106690; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶

153, Ex. 152 at 1122. However, 46 C.F.R. § 56.50-105(a)(1)(ii) incorporates a different version of ASTM E23. 46 C.F.R. § 56.50-105(a)(1)(ii) incorporates ASTM E23-96, not ASTM E23-82. 46 C.F.R. §§ 56.50-105(a)(1)(ii); 56.01-2(e)(68).

- fff. **ASTM E145-94<sup>e1</sup>**: PRO identifies 40 C.F.R. § 63.14 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106516; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1182. However, 40 C.F.R. § 63.14(h)(103) incorporates ASTM E145-94 (2001), not ASTM E145-94<sup>e1</sup>. 40 C.F.R. § 63.14(h)(103).
- ggg. **ASTM E283-91 (1999)**: PRO identifies 10 C.F.R. § 434.402.2 and 24 C.F.R. § 200, Appendix A as the incorporating by reference regulations. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106751; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1223. However, 10 C.F.R. § 434.402.2 does not reference ASTM E 283, and 24 C.F.R. § 200, Appendix A incorporates ASTM E283-91, not ASTM E283-91 (1999).
- hhh. **ASTM E408-71**: PRO identifies 16 C.F.R. § 460.5(b) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106805; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1230. However, 16 C.F.R. § 460.5(b) incorporates ASTM E408-71, reapproved in 2002, not ASTM E408-71. 16 C.F.R. § 460.5(b).
- iii. **ASTM E424-71**: PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106810; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1235. However, 24 C.F.R. § 200, Subpart S does not reference ASTM E424-71. 24 C.F.R. § 200, Subpart S.
- jjj. **ASTM E606-80**: PRO identifies 24 C.F.R. § 200.946 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106820; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1244. However, 24 C.F.R. § 200.946 does not reference ASTM E606-80. 24 C.F.R. § 200.946.
- kkk. **ASTM E695-79 (1997)<sup>e1</sup>**: PRO identifies 24 C.F.R. § 200.946(a)(1)(viii) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106851; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1273. However, 24 C.F.R. § 200.946(a)(1)(viii) incorporates ASTM E 695-79, reapproved in 1991, not ASTM E695-79 (1997)<sup>e1</sup>. 24 C.F.R. § 200.946(a)(1)(viii).
- lll. **ASTM E711-87 (1992)**: PRO identifies 40 C.F.R. § 63, Subpart DDDDD, Table 6 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106859; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1279. However, 40 C.F.R. § 63, Subpart DDDDD

cites ASTM E711-87, reapproved in 2004, not ASTM E711-87 (1992). 40 C.F.R. §§ 63, Subpart DDDDD; 63.14(h)(108).

- mmm. **ASTM E776-87 (1992):** PRO identifies 40 C.F.R. § 63, Subpart DDDDD, Table 6 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00106908; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1300. However, 40 C.F.R. § 63, Subpart DDDDD, Table 6 incorporates ASTM E776-87, reapproved in 2009, not ASTM E776-87 (1992). 40 C.F.R. §§ 63, Subpart DDDDD; 63.14(h)(109).
- nnn. **ASTM E885-88:** PRO identifies 40 C.F.R. § 63, Subpart DDDDD, Table 6 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1308. However, 40 C.F.R. § 63, Subpart DDDDD, Table 6 does not reference ASTM E885-88. 40 C.F.R. § 63, Subpart DDDDD, Table 6.
- ooo. **ASTM E1337-90 (1996):** PRO identifies 49 C.F.R. §§ 571.105, S6.9.2(a) as the incorporating by reference regulations. Wise Decl. ¶ 153, Ex. 152 at 1336. However, 49 C.F.R. §§ 571.105 and 571.5 incorporate ASTM E1337-90, reapproved in 2008, not ASTM E1337-90 (1996). 49 C.F.R. §§ 571.105(a), (b); 571.5(d)(39).
- ppp. **ASTM F462-79 (1999):** PRO identifies 24 C.F.R. § 200, Subpart S as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107383; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19. However, 24 C.F.R. § 200, Subpart S does not reference ASTM F462-79 (1999). 24 C.F.R. § 200, Subpart S.
- qqq. **ASTM F478-92 (1999):** PRO identifies 29 C.F.R. § 1910.137(b)(2)(ix) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107415; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1343. However, 29 C.F.R. § 1910.137(b)(2)(ix) incorporates a different version of ASTM F478. 29 C.F.R. § 1910.137(b)(2)(ix) incorporates ASTM F478-09, not ASTM F478-92 (1999).
- rrr. **ASTM F631-80 (1985):** PRO identifies 33 C.F.R. § 156.40 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1349. However, 33 C.F.R. § 156.40 does not exist; 33 C.F.R. § 156.400 does not reference any ASTM standard, and 33 C.F.R. § 156.106(e)(1) incorporates a different version of ASTM F631. 33 C.F.R. § 156.106(e)(1) incorporates ASTM F631-93, not ASTM F631-80 (1985).
- sss. **ASTM F682-82a (1988):** PRO identifies 46 C.F.R. § 56.01-2 as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1361. However, 46 C.F.R. § 56.01-2 incorporates ASTM F682-82a, reapproved in 2008, not ASTM F682-82a (1988). 46 C.F.R. § 56.01-2(e)(69).

- ttt. **ASTM F715-81 (1986):** PRO identifies 33 C.F.R. § 154.106 as the incorporating by reference regulations. Wise Decl. ¶ 153, Ex. 152 at 1368. However, both 33 C.F.R. §§ 155, Appendix B and 154.106 incorporate a different version of ASTM F715. 33 C.F.R. §§ 155, Appendix B and 154.106 incorporate ASTM F715-95, not ASTM F715-81 (1986). 33 C.F.R. §§ 155.140(c)(2); 155, Appendix B; 154.106(e)(2).
- uuu. **ASTM F722-82 (1988):** PRO identifies 33 C.F.R. §§ 155.140 as the incorporating by reference regulations. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107471; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1377. However, 33 C.F.R. §§ 155.140 does not reference ASTM F722, and 33 C.F.R. § 154, Appendixes A and B incorporate ASTM F722-82, reapproved in 2008, not ASTM F722-82 (1988). 33 C.F.R. § 154, Appendix A, B; 154.106(e)(3).
- vvv. **ASTM F808-83 (1988)e1:** PRO identifies 33 C.F.R. § 154, Appendix C, 6.3.1 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107483; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1389. However, 33 C.F.R. § 154, Appendix C cites, but does not incorporate by reference, “Item 26 in ASTM F 808.” 33 C.F.R. § 154, Appendix C. ASTM F808-83 is also not included amongst the ASTM standards incorporated by reference in 33 C.F.R. § 154.106.
- www. **ASTM F1006-86 (1997):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107009; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1403. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1006-86, reapproved in 2008, not ASTM F1006-86 (1997). 46 C.F.R. §§ 56.60-1(b), 56.60-2(e)(70).
- xxx. **ASTM F1007-86 (1996)e1:** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1408. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1007-86, reapproved in 2007, not ASTM F1007-86 (1996)e1. 46 C.F.R. §§ 56.60-1(b), 56.60-2(e)(70).
- yyy. **ASTM F1020-86 (1996)e1:** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1420. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1020-86, reapproved in 2011, not ASTM F1020-86 (1996)e1. 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(72).
- zzz. **ASTM F1120-87 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1424. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1120-87, reapproved in 2010, not ASTM F1120-87 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(73).

- aaaa. **ASTM F1121-87 (1998):** PRO identifies 33 C.F.R. § 126.15(a)(5) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107047; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1433. However, 33 C.F.R. § 126.15(a)(5) incorporates ASTM F1121-87, reapproved in 2010, not ASTM F1121-87 (1998). 33 C.F.R. §§ 126.15(a)(5), 126.5(b).
- bbbb. **ASTM F1122-87 (1998):** PRO identifies 33 C.F.R. § 154.500(d)(3) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107055; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1437. However, 33 C.F.R. § 154.500(d)(3) incorporates ASTM F1122-87, reapproved in 1992, not ASTM F1122-87 (1998). 33 C.F.R. §§ 154.500(d)(3), 154.106(e)(4).
- cccc. **ASTM F1123-87 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1451. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1123-87, reapproved in 2010, not ASTM F1123-87 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(74).
- dddd. **ASTM F1139-88 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107074; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1139-88, reapproved in 2010, not ASTM F1139-88 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(75).
- eeee. **ASTM F1172-88 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1481. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1172-88, reapproved in 2010, not ASTM F1172-88 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(76).
- ffff. **ASTM F1199-88 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1523. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1199-88, reapproved in 2010, not ASTM F1199-88 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(78).
- gggg. **ASTM F1200-88 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107162; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1200-88, reapproved in 2010, not ASTM F1200-88 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(79).
- hhhh. **ASTM F1201-88 (1998):** PRO identifies 46 C.F.R. § 56.60-1(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1528. However, 46 C.F.R. § 56.60-1(b) incorporates ASTM F1201-88,



reapproved in 2010, not ASTM F1201-88 (1998). 46 C.F.R. §§ 56.60-1(b), 56.01-2(e)(80).

- iiii. **ASTM F1271-90 (1995)<sup>e1</sup>**: PRO identifies 46 C.F.R. § 39.20-9(c)(1) as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00241177; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1534. However, 46 C.F.R. § 39.20-9(c)(1) does not exist, and 46 C.F.R. § 39.2009(a)(3) incorporates a different version of ASTM F1271. 46 C.F.R. § 39.2009(a)(3) incorporates a different version of ASTM F1271. 46 C.F.R. § 39.2009(a)(3) incorporates ASTM F1271-89, not ASTM F1271-90 (1995)<sup>e1</sup>. 46 C.F.R. §§ 39.2009(a)(3), 39.1005(d)(2).
- jjjj. **ASTM F1273-91 (1996)<sup>e1</sup>**: PRO identifies 46 C.F.R. § 32.20-10 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107183; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1540. However, 46 C.F.R. § 32.20-10 incorporates ASTM F1273-91, reapproved in 2007, not ASTM F1273-91 (1996)<sup>e1</sup>. 46 C.F.R. §§ 32.20-10, 32.01-1(c)(2).
- kkkk. **ASTM F1323-98**: PRO identifies 46 C.F.R. § 63.25-9 as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00107247; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1576. However, 46 C.F.R. § 63.25-9(a) incorporates a different version of ASTM F1323. 46 C.F.R. § 63.25-9(a) incorporates ASTM F1323-2001, not ASTM F1323-98. 46 C.F.R. §§ 63.25-9(a), 63.05-1(d)(1).
- llll. **ASTM F1471-93**: PRO identifies 40 C.F.R. § 86.1310-2007(b)(1)(iv)(B) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1585. However, 40 C.F.R. § 86.1310-2007 is reserved by 79 FR 23704 and does not reference ASTM F1471. 40 C.F.R. § 86.1310-2007.
- mmmm. **ASTM F1546/F1546M-96**: PRO identifies 46 C.F.R. § 162.027-3(a) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1599. However, 46 C.F.R. § 162.027-3(a) incorporates ASTM F1546/F1546 M-96, reapproved in 2012, not ASTM F1546/F1546M-96. 46 C.F.R. §§ 162.027-3(a); 162.027-2(b)(1).
- nnnn. **ASTM G154-00a**: PRO identifies 49 C.F.R. § 571.106, S12.7(b) as the incorporating by reference regulation. Wise Decl. ¶ 153, Ex. 152 at 1631. However, 49 C.F.R. § 571.106 incorporates ASTM G154-00, not ASTM G154-00a. 49 C.F.R. §§ 571.106, 571.5(d)(38).

Incorrect Citations re: NFPA's Standards

37. Additionally, PRO's posting of the 2000 edition of NFPA 101 states that it is posted "By Authority of the Code of Federal Regulations: 59 C.F.R. 130." Wise Decl. ¶ 168, Ex. 167 at

1. The Code of Federal Regulations, however, currently spans only Titles 1 to 50; there is no Title 59. See Code of Federal Regulations (Annual Edition), available at <https://www.govinfo.gov/app/collection/C.F.R.>

38. Similarly, PRO's postings on the Internet Archive often point to outdated regulations, with no information that the regulation has been superseded. For example, PRO's posting of the 2005 edition of NFPA 70 says it is posted "*By Authority of the Code of Federal Regulations: 49 C.F.R. 192.189(c).*" Wise Decl. ¶ 168, Ex. 167 at 2. That section provides that "[e]lectrical equipment in vaults must conform to the applicable requirements of Class 1, Group D, of the National Electrical Code, NFPA-70 (incorporated by reference, see § 192.7)." Section 192.7(h), however, incorporates the 2011, not the 2005, edition of NFPA 70. 49 C.F.R. § 192.7(h)(4).

39. Likewise, PRO's copy of the 2003 NFPA 30 states that it is posted "*By Authority of the Code of Federal Regulations: 49 C.F.R. 192.*" Wise Decl. ¶ 168, Ex. 167 at 3. Section 192.7 of Title 49 incorporates the 2012 edition of NFPA 30, but not the 2003 edition. 49 C.F.R. § 192.(h)(1).

40. PRO's posting of the 2005 NFPA 99 contains the same error, telling readers it is posted "*By Authority of the Code of Federal Regulations: 38 C.F.R. 51.200(b)(4),*" Wise Decl. ¶ 168, Ex. 167 at 4, even though that section references the 2012 edition of NFPA 99. 38 C.F.R. § 51.200(i)(2)(ii).

Incorrect Citations re: ASHRAE's Standards

41. In addition, PRO's posting of ASHRAE Standard 90.1-2004 on the Internet Archive states that it has been incorporated by reference in Minnesota, Maine and Nevada, Wise Decl. ¶ 170, Ex. 169 at 1, but those states' codes are actually based on a different standard, the

International Energy Conservation Code (“IECC”), for which compliance with ASHRAE 90.1 is just an alternative compliance option, Wise Decl. ¶ 171, Ex. 170.

42. The same is true with PRO’s posting of ASHRAE Standard 90.1-2007, which asserts that the standard has been incorporated in Illinois and California, ¶ 170, Ex. 169 at 2, which both have adopted the IECC rather than 90.1 or created their own codes that are more stringent than even later versions of 90.1 (that postdate what PRO has posted), Wise Decl. ¶ 171, Ex. 170.

43. PRO’s postings on Internet Archive also point to instances where the statute or regulation incorporating the standard triggers an obligation for a government actor but not for individuals. For instance, PRO’s postings of ASHRAE 90.1-2004 and ASHRAE 90.1-2007 both reference 10 C.F.R. § 433.4, which states “[a]ll Federal agencies shall design new Federal buildings” that meet the ASHRAE standards, but does not impose a similar requirement on private actors. *See* Wise Decl. ¶ 170, Ex. 169.

**C. PRO Copies And Distributes Plaintiffs’ Works, Regardless Of Whether They Are Essential To Comply With Any Legal Duty**

ASTM Standards (And Portions Thereof) That Do Not Impose Legal Duties

44. Apart from the instances where PRO has redacted the ASTM logo discussed above, PRO reproduced and displayed the full text of each of the ASTM Standards. Wise Decl. ¶¶ 151, 153, Exs. 150, 152; Rubel Decl. ¶ 5, Ex. 2 (Rule 30(b)(6) Dep. of Public Resource at 158:22-159:6).

45. PRO posted in their entirety numerous standards that are incorporated by regulations in such a manner as to be optional or references. For example, 40 C.F.R. § 86.113-04(a)(1) incorporates ASTM D86-07, the “Standard Test Method for Distillation of Petroleum Products and Liquid Fuels at Atmospheric Pressure.” But the regulation expressly provides that ASTM D86 is a mere “reference procedure,” and that a regulated entity can comply with the

codified requirements by meeting “substantially equivalent specifications approved by the EPA Administrator.” See 40 C.F.R. § 86.113-04(a)(1).

46. Similarly, PRO identifies 40 C.F.R. Appendix D to Part 75, the “Optional S02 Emmissional Data Protocol for Gas-Fired and Oil-Fired Units” as the regulation incorporating ASTM standard D1217-93, the “Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer.” This regulation incorporates the standard to be optional; Subsection 2.2.4.3(d) expressly provides an alternative procedure for sampling oil from shipment tanks or containers and testing samples for density, of which D1217-93 is just one. See 40 C.F.R. Appendix D to Part 75.

47. This is true for other ASTM Works as well. For instance:

- a. **ASTM F715-95:** PRO identifies 33 C.F.R. § 155, Appendix B, 2.4 as the regulation that incorporates ASTM F715-95, the “Standard Test Methods for Coated Fabrics Used for Oil Spill Control and Storage.” Wise Decl. ¶ 153, Ex. 152 at 1368. This regulation expressly states that testing must be in accordance with either ASTM F715 “or other tests approved by the Coast Guard.”
- b. **ASTM F1321-92:** PRO identifies 46 C.F.R. § 28.535(d) as the regulation that incorporates ASTM F1321, the “Standard Guide for Conducting a Stability Test (Lightweight Survey and Inclining Experiment) to Determine Light Ship Displacement and Centers of Gravity of a Vessel.” Wise Decl. ¶ 153, Ex. 152 at 1546. This regulation expressly states that ASTM F1321 “*may be used as guidance* for any inclining test or deadweight survey conducted under this section.”
- c. **ASTM A369-A369M-92, B42-96, B68-95, B75-97, B88-96, B111-95, B315-93, and F1006:** PRO identifies 46 C.F.R. § 56.60-1(b), as the incorporating by reference regulation. Wise Decl. ¶ 151, Ex. 150 at PRO\_00085147, PRO\_00092176, PRO\_00092980, PRO\_00093012, PRO\_00093103, PRO\_00093196, PRO\_00093301, and PRO\_00107009; Wise Decl. ¶ 165, Ex. 164 at Interrog. 19; Wise Decl. ¶ 153, Ex. 152 at 1403. The regulation contains a table of acceptable commercial standards from American National Standards Institute, ASTM, American Society for Mechanical Engineers, and several other SDOs that are each considered to comply with the regulation. 46 C.F.R. § 56.60-1(b). The regulation also contains a note indicating that: “The Coast Guard

will consider use of alternative pipes, tubing, and fittings when it receives certification of their mechanical properties.” 46 C.F.R. § 56.60-1(b).

48. On numerous occasions, PRO posted entire ASTM Standards, when only a portion of those standards is actually incorporated by reference into law. For instance:

- a. **ASTM B122/B122M:** PRO identifies 46 C.F.R. § 119.440 as the incorporating by reference regulation, Wise Decl. ¶ 151, Ex. 150 at PRO\_00092264, but that regulation only incorporates B122/B122M with respect to copper alloy C71500, one of eleven copper alloys addressed in the standard. 46 C.F.R. § 119.440. The portions of the standard related to the other ten copper alloys are unnecessary to understand the minimum thickness for copper alloy C71500. *See* Wise Decl. ¶ 151, Ex. 150 at PRO\_00092264.
- b. **ASTM B85-96:** PRO identifies 46 C.F.R. § 56.60-2 as the incorporating by reference regulation, Wise Decl. ¶ 153, Ex. 152 at 252, but that regulation only incorporates one table within ASTM B85-96—table X-2—and states that “[t]ension tests shall be performed to determine tensile strength, yield strength, and elongation” in accordance with the minimum value in X-2. 46 C.F.R. § 56.60-2. The remainder of the standard is unnecessary to determine the minimum value in X-2. *See* Wise Decl. ¶ 153, Ex. 152 at 252. Table X-2 also contains values for shear strength and fatigue strength that are unnecessary to understand the minimum value for the required tension tests. *Id.*
- c. **ASTM B283-96:** PRO identifies 46 C.F.R. § 56.60-2 as the incorporating by reference regulation, Wise Decl. ¶ 151, Ex. 150 at PRO\_00092925, but that regulation only requires that tension tests shall be performed to determine tensile strength, yield strength, and elongation with the minimum values listed in Table 3 of ASTM B283-96. 46 C.F.R. § 56.60-2. All portions of the standard other than Table 3 are unnecessary to comply with the regulation. Additionally, Table 3 provides Rockwell hardness measurements, which are also unnecessary to understand the minimum value required for other three measurements. *See* Wise Decl. ¶ 151, Ex. 150 at PRO\_00092925.
- d. **ASTM E23:** PRO identifies 46 C.F.R. § 56.50-105(a)(1)(ii) as the incorporating by reference regulation, Wise Decl. ¶ 151, Ex. 150 at PRO\_00106690, but that regulation requires testing for low temperature toughness using the Charpy V-notch specimen as shown in ASTM E23, Figure 4. 46 C.F.R. 56.50-105(a)(1)(ii). Only Figure 4—no other part of the standard—is necessary to determine the low temperature toughness. *Id.*

- e. **ASTM E145-94 (2001):** PRO identifies 40 C.F.R. § 63.14 as the incorporating by reference regulation, Wise Decl. ¶ 151, Ex. 150 at PRO\_00106516, but Appendix A to Subpart PPPP of 40 C.F.R. § 63.14 references only forced draft oven types IIA or IIB. 40 C.F.R. § 63.14. The ASTM E145-94 (2001) standard addresses other types of forced draft ovens. *See* Wise Decl. ¶ 151, Ex. 150 at PRO\_001065.

49. In addition, PRO posts certain ASTM Standards in their entirety, despite the fact that the incorporation by reference has no direct legal effect on any private party's conduct. As just one example, ASTM A307 is incorporated by reference in 46 C.F.R. § 56.25-20(b), which governs the design, construction, and installation of piping systems in marine vessels. The regulation provides that, with respect to bolts used in ships' and barges' piping systems, "[w]hen class 250 cast iron flanges are used or when class 125 cast iron flanges are used with ring gaskets, the bolting material must be carbon steel conforming to ASTM A307 (incorporated by reference, see 46 C.F.R. § 56.01-2), Grade B." 46 C.F.R. § 56.25-20(b). The persons governed by the regulation at issue—those who design, construct and install piping systems in marine vessels—do not need access to ASTM A307 to comply with this regulation. They simply have to purchase bolts that are designated as A307, Grade B bolts; they do not need to know how to manufacture such bolts.

50. ASTM's standards also contain numerous non-mandatory portions that are aids or supplements to the standard. For example, ASTM's Manual of Style contains certain sections that must be included in each ASTM standard, such as the title of the standard. O'Brien Decl. Ex. 5 at A-2. Other sections, are only included when the subject matter is pertinent to the document. *Id.*

51. ASTM standards may include the following non-mandatory sections:

- a. **Appendixes:** "Additional information may be included in one or more annexes or 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 [standard]. *Id.* at B-8.

- b. **Summary of Changes:** Identifies the “location of selected changes to [the] standard since the last issue. . .” *Id.* at C-3.
- c. **Summary of Test Method:** “[a] brief outline of the test method, describing in the passive voice its essential features without the details that are a necessary part of the complete statement of procedure.” *Id.* at A-5.
- d. **Significance and Use:** “[i]nclude in this section information that explains the relevance and meaning of the test. State the practical uses for the test and how it is typically employed.” *Id.*
- e. **Supplementary requirements:** “These should not include statements that would allow the lowering of minimum requirements of the standard . . . . Usually these only apply when specified by the purchaser in the purchase order or contract.” *Id.* at B-7.

52. There are 61 ASTM standards at issue in this motion that contain appendixes. Wise Decl. at ¶ 148, Ex. 149.

Standard	Edition	Pin Cite
A106/A106 M	1994	ASTM000200-01.
B21	1979a	ASTM000363.
B68	1996	ASTM000469.
B75	1997	ASTM000498-99.
B124	1984	ASTM000505-07.
B209	1995	ASTM000375.
B283	1995	ASTM000380-81.
D86	1996	ASTM000385.
D512	1980e 1	ASTM000436-39.
D975	1996	ASTM000452-54
D2216	1993	ASTM000463.
D4329	1979	ASTM001693.
D4986	1986	ASTM000491-92.
A106/A106 M	1979(1997)	ASTM000523.
B21	1989(1993) <sup>e1</sup>	ASTM000564.
B68	1984	ASTM000570-71.
B75	1970(1982)	ASTM000597.
B124	2007	ASTM001208-14.
B209	1998	ASTM000998-1000.
B283	1989(1999)	ASTM001095.
D86	2007	ASTM001220-34.
D512	1998b	ASTM001238-53.
D975	1990(1994) <sup>e1</sup>	ASTM001698.
D2216	1995(1999)	ASTM000608-609.
D4329	1986(1996)	ASTM000613.
D4986	1993(1997)	ASTM000641-42.
A106/A106 M	1995	ASTM000712.

Standard	Edition	Pin Cite
B21	1986	ASTM000722-25.
B68	1997	ASTM000727-29.
B75	1996	ASTM000752-56.
B124	1996	ASTM000781-82.
B209	1998	ASTM000796-800.
B283	1991(1996)	ASTM000806-807.
D86	1998	ASTM000896-901.
D512	1996	ASTM000918-19.
D975	1996	ASTM000956-57.
D2216	1996	ASTM000965-66.
D4329	1998	ASTM000984-86.
D4986	1995	ASTM001042-44.
A106/A106 M	1998	ASTM001088-89.
B21	1996	ASTM001113.
B68	1998a	ASTM001122-23.
B75	1998	ASTM001147-60.
B124	1982	ASTM001342-44.
B209	1980	ASTM001405-406.
B283	1995	ASTM001446-48.
D86	1971	ASTM001736-37.
D512	1980	ASTM001376-79.
D975	1985	ASTM001744.
D2216	1987(1992)	ASTM001388-90.
D4329	1997	ASTM001414.
D4986	1980(1985)	Page 829.
A106/A106 M	1993	ASTM001632.
B21	1982a(1988)	ASTM001636-37.
B75	1992	ASTM001561-74.
B124	1998	ASTM001580-81.
B209	1993	ASTM001588-93.
B283	1999	ASTM001609-11.
D86	1990	ASTM001681-82.
D512	1997	ASTM001668-69.
D975	2000a	ASTM001674-78.

53. There are 13 ASTM standards at issue in this motion that contain a summary of changes. Wise Decl. ¶ 148, Ex. 149.

Standard	Edition	Pin Cite
A106/A106 M	2004b	Page 8.
B21	1996	ASTM000434.
B68	1995	ASTM000485.
B75	1997	ASTM000499.
B124	1996	ASTM000385.
B209	1996	ASTM000424.



B283	1996	ASTM000454-55.
D86	2007	ASTM001215.
D512	1989(1999)	ASTM001096.
D975	2007	ASTM001235.
D2216	1998	ASTM000811-12.
D4329	1999	ASTM001069-70.
D4986	1998	ASTM001089.

54. There are 65 ASTM standards at issue in this motion that contain a summary of test method section. Wise Decl. ¶ 148, Ex. 149.

Standard	Edition	Pin Cite
C177	1997	ASTM000534-35.
C236	1989(1993) <sup>e1</sup>	ASTM000555.
C518	1991	ASTM000578.
D86	2007	ASTM001190.
D129	1995	ASTM000631.
D512	1989(1999)	ASTM001091-93.
D611	1982(1998)	ASTM001124.
D665	1998e 1	ASTM001181.
D1217	1993(1998)	ASTM000601.
D1246	1995(1999)	ASTM000606.
D1253	1986(1996)	ASTM000610.
D1266	1998	ASTM000614-15.
D1298	1999	ASTM000626.
D1335	1967(1972)	ASTM000636.
D1480	1993(1997)	ASTM000647.
D1481	1993(1997)	ASTM000653.
D1552	1995	ASTM000693.
D1688	1995	ASTM000707-08; ASTM000710.
D1890	1996	ASTM000731.
D1943	1996	ASTM000736.
D1945	1996	ASTM000741.
D2013	1986(1994)	ASTM000763.
D2015	1996	ASTM000774-75.
D2036	1998	ASTM000783-84.
D2163	1991(1996)	ASTM000802.
D2216	1998	ASTM000809.
D2460	1997	ASTM000830.
D2502	1992(1996)	ASTM000835.
D2503	1992(1997)	ASTM000839.
D2597	1994(1999)	ASTM000865-66.
D2622	1998	ASTM000875.
D2724	1987(1995)	Page 2.
D2879	1997	ASTM000903-04.

D3120	1996	ASTM000914.
D3173	1987(1996)	ASTM000920.
D3178	1989(1997)	ASTM000929.
D3236	1988(1999)	ASTM000943.
D3246	1996	ASTM000951.
D3286	1996	ASTM000958-59.
D3454	1997	ASTM000971.
D3697	1992(1996)	ASTM000987.
D4239	1997 <sup>e1</sup>	ASTM001045-46.
D4294	1998	ASTM001061.
D4809	1995	ASTM001072.
D4891	1989(1994) <sup>e1</sup>	ASTM001080.
D4986	1998	ASTM001084.
D5257	1997	ASTM001097-98.
D5373	1993(1997)	ASTM001103-04.
D5673	1996	ASTM001108.
D5865	1998a	ASTM001114-15.
D6228	1998	ASTM001161-62.
D6420	1999	ASTM001168.
D6503	1999	ASTM001174.
E23	1982	ASTM001321.
E96	1995	ASTM001441-42.
E283	1991(1999)	ASTM001258.
E408	1971	ASTM001730-31.
E424	1971	ASTM001733.
E681	1985	ASTM001738.
E695	1979(1997) <sup>e1</sup>	ASTM001380.
E711	1987(1992)	ASTM001384.
E776	1987(1992)	ASTM001749.
E885	1988	ASTM001416-17.
E1337	1990(1996)	ASTM001268.
F1471	1993	ASTM001582-83.

55. There are 95 ASTM standards at issue in this motion that contain a significance and use section. Wise Decl. at Ex ¶ 148, Ex. 149.

Standard	Edition	Pin Cite
B557	1984	ASTM000470.
C177	1997	ASTM000535-36.
C236	1989(1993) <sup>e1</sup>	ASTM000555-56.
C509	1984	ASTM000566-67.
C518	1991	ASTM000578-79.
D86	2007	ASTM001190.

Standard	Edition	Pin Cite
D512	1989(1999)	ASTM001090.
D611	1982(1998)	ASTM001124.
D665	1998 <sup>e1</sup>	ASTM001181-82.
D814	1995	ASTM001717.
D1217	1993(1998)	ASTM000601.
D1246	1995(1999)	ASTM000606.
D1253	1986(1996)	ASTM000610.
D1266	1998	ASTM000615.
D1298	1999	ASTM000626.
D1335	1967(1972)	ASTM000636.
D1412	1993(1997)	ASTM000639.
D1480	1993(1997)	ASTM000647.
D1481	1993(1997)	ASTM000653.
D1518	1985(1998) <sup>e1</sup>	ASTM000660.
D1552	1995	ASTM000693.
D1688	1995	ASTM000706.
D1835	1997	ASTM000728-29.
D1890	1996	ASTM000731.
D1943	1996	ASTM000736-37.
D1945	1996	ASTM000741.
D1946	1990(1994) <sup>e1</sup>	ASTM000757.
D2013	1986(1994)	ASTM000763.
D2015	1996	ASTM000775.
D2036	1998	ASTM000784.
D2163	1991(1996)	ASTM000802.
D2216	1998	ASTM000809.
D2234	1998	ASTM000814.
D2460	1997	ASTM000830.
D2502	1992(1996)	ASTM000835.
D2503	1992(1997)	ASTM000839.
D2597	1994(1999)	ASTM000866.
D2622	1998	ASTM000875-76.
D2724	1987(1995)	Page 2.
D2777	1998	ASTM000889.
D2879	1997	ASTM000904.
D3120	1996	ASTM000914.
D3173	1987(1996)	ASTM000920

Standard	Edition	Pin Cite
D3178	1989(1997)	ASTM000929.
D3236	1988(1999)	ASTM000943-44.
D3246	1996	ASTM000951.
D3286	1996	ASTM000959.
D3371	1995	ASTM000967.
D3454	1997	ASTM000971-72.
D3588	1998	ASTM000979-80.
D3697	1992(1996)	ASTM000987.
D4177	1995	ASTM001020.
D4239	1997 <sup>e1</sup>	ASTM001046.
D4268	1993	ASTM001055-59.
D4294	1998	ASTM001061.
D4329	1999	ASTM001066-67.
D4809	1995	ASTM001072.
D4891	1989(1994) <sup>e1</sup>	ASTM001080.
D4986	1998	ASTM001084-85.
D5257	1997	ASTM001098.
D5373	1993(1997)	ASTM001104.
D5489	1996a	Page 775.
D5673	1996	ASTM001108.
D5865	1998a	ASTM001115.
D6216	1998	ASTM001135-36.
D6228	1998	ASTM001162.
D6420	1999	ASTM001168.
D6503	1999	ASTM001174.
E23	1982	ASTM001321.
E72	1980	ASTM001393-400.
E96	1995	ASTM001442.
E169	1987	ASTM001297-98.
E185	1982	ASTM001312-13.
E260	1996	ASTM001346.
E283	1991(1999)	ASTM001258.
E424	1971	ASTM001733.
E606	1980	ASTM001367-68.
E681	1985	ASTM001738.
E695	1979(1997) <sup>e1</sup>	ASTM001380.

Standard	Edition	Pin Cite
E711	1987(1992)	ASTM001385.
E773	1997	ASTM001407.
E776	1987(1992)	Yes, ASTM001749.
E885	1988	ASTM001417.
E1337	1990(1996)	ASTM001268.
F478	1992(1999)	ASTM001620.
F631	1980(1985)	Page 826-27.
F631	1993	ASTM001629.
F715	1981(1986)	Page 803.
F715	1995	ASTM 1638.
F808	1983(1988) <sup>e1</sup>	ASTM001652 - 53.
F1321	1992	ASTM001548.
F1471	1993	ASTM001583.
G21	1990	ASTM001679
G151	1997	ASTM001661 - 62.
G154	2000a	ASTM001671

56. There are 23 ASTM standards at issue in this motion that contain a supplementary requirements section. Wise Decl. ¶ 148, Ex. 149.

Standard	Edition	Pin Cite
A36	1977a <sup>e</sup>	Pages (136-38).
A36/A36M	1997a <sup>e1</sup>	ASTM003436.
A106/A106 M	2004b	Pages 7-8.
A203/A203 M	1997	ASTM000171.
A242	1979	ASTM000182.
A285	1978	ASTM000184-85.
A333/A 333M	1994	ASTM000200.
A369/A 369M	1992	ASTM000205.
A441	1979	ASTM000262-63.
A514	1977	ASTM000309-11.
A522/A 522M	1995b	ASTM000321.
A572	1979	ASTM000330-31.
A588	1979a	ASTM000332-33.
A615	1979	ASTM000342.
A633	1979a	ASTM000361-62.
B16	1992	ASTM000392.
B42	1996	ASTM000468.

Standard	Edition	Pin Cite
B88	1996	ASTM000517.
B96	1993	ASTM000521.
B111	1995	ASTM000374-75.
B283	1996	ASTM000451.
E11	1995	ASTM001265.
F1120	1987(1998)	ASTM001466.

NFPA Standards (and Portions Thereof) That Do Not Impose Legal Duties

57. Each of NFPA’s 23 standards at issue in this case include sections that are optional, or permissive, designated by the language “shall be permitted” or “shall not be required.” As explained in the 2014 NEC: “Permissive rules of this Code are those that identify actions that are allowed but not required, are normally used to *describe options or alternative methods*, and are characterized by the use of the terms *shall be permitted* or *shall not be required*.” Supp. Pauley Decl. ¶ 27, Ex. P (NFPA 70, 2014 ed.) at art. 90.5(B) (NFPA-PR0098088) (emphasis added). An example of such an optional rule is article 324.56(A) of the 2014 NEC regarding FCC Systems Alterations, which states “Alterations to FCC systems shall be permitted.” *Id.* Ex. P at art. 324.56(A) (NFPA-PR0098260).

58. Similar optional provisions appear throughout the standards. *See* Supp. Pauley Decl. Ex. A (NFPA 1, 2003 ed.) at ch. 10.13.3.10 at 1-49 (NFPA-PR0013107); Ex. B (NFPA 1, 2006 ed.) at ch. 20.5.2.3.2 at 1-139 (NFPA-PR0013654); Ex. C (NFPA 10, 2002 ed.) at ch. 6.1.6 at 10-12 (NFPA-PR0014084); Ex. D (NFPA 11, 2005 ed.) at ch. 6.10.2.3 at 11-25 (NFPA-PR0014167); Ex. E (NFPA 12, 2005 ed.) at ch. 4.3.3.1.2 at 12-8 (NFPA-PR0014251); Ex. F (NFPA 13, 2002 ed.) at ch. 9.2.4.2 at 13-85 (NFPA-PR0014394); Ex. G (NFPA 25, 2002 ed.) at ch. 13.2.3.3 at 25-40 (NFPA-PR0020279); Ex. H (NFPA 30, 2003 ed.) at ch. 7.3.7.7 at 30-64 (NFPA-PR0014720); Ex. I (NFPA 54 (2006 ed.) at ch. 5.3.2.2 at 54-17 (NFPA-PR0014807); Ex. J (NFPA 58, 2001 ed.) at ch. 8.2.2.6 at 58-60 (NFPA-PR0015018); Ex. K (NFPA 58, 2004 ed.) at

ch. 5.7.1.4(C) at 58-15 (NFPA-PR0015096); Ex. L (NFPA 59, 2004 ed.) at ch. 5.5.2.6 at 59-13 (NFPA-PR0015228); Ex. M (NFPA 70, 1999 ed.) at ch. 240-23 at 70-76 (NFPA-PR0015342); Ex. N (NFPA 70, 2005 ed.) at ch. 504.70 at 70-369 (NFPA-PR0016284); Ex. O (NFPA 70, 2008 ed.) at ch. 517.77 at 70-441 (NFPA-PR0017137); Ex. P (NFPA 70, 2014 ed.) at ch. 324.56(A) at 70-197 (NFPA-PR0098260); Ex. Q (NFPA 72, 2002 ed.) at ch. 11.3.7 at 72-105 (NFPA-PR0018525); Ex. R (NFPA 99, 2005 ed.) at ch. 11.7.2.4 at 99-104 (NFPA-PR0018791); Ex. S (NFPA 101, 2000 ed.) at ch. 13.7.4.4.3 at 101-123 (NFPA-PR0019081); Ex. T (NFPA 101, 2003 ed.) at ch. 7.5.4.1.3 at 101-65 (NFPA-PR0019422); Ex. U (NFPA 101, 2006 ed.) at ch. 36.4.4.3.1 at 101-268 (NFPA-PR0020039); Ex. V (NFPA 704, 2007 ed.) at ch. 4.1.5 at 704-5 (NFPA-PR0020217); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at ch. 610.43(B) at 70-531 (NFPA-PR0018069).

59. Each of NFPA's 23 standards at issue, provide that the specific provisions of the NFPA standard are not the *only* way to comply with the law, using language that expressly allows for other materials and methods for compliance that would be acceptable to the authority having jurisdiction. *See, e.g.*, Supp. Pauley Decl. Ex. I (NFPA 54, 2006 ed.) at ch. 1.4 at 54-8 (NFPA-PR0014798) ("The provisions of this code are not intended to prevent the use of any material, method of construction, or installation procedure not specifically prescribed by this code, provided any such alternative is acceptable to the authority having jurisdiction.").

60. Similar optional provisions appear throughout the standards. *See* Supp. Pauley Decl. ¶ 26; Ex. A (NFPA 1, 2003 ed.) at ch. 1.4 (NFPA-PR0013044); Ex. B (NFPA 1, 2006 ed.) at ch. 1.4 (NFPA-PR0013527); Ex. C (NFPA 10, 2002 ed.) at ch. 1.2.1 (NFPA-PR0014076); Ex. D (NFPA 11, 2005 ed.) at ch. 1.5 (NFPA-PR0014147); Ex. E (NFPA 12, 2005 ed.) at ch. 1.2.2 (NFPA-PR0014247); Ex. F (NFPA 13, 2002 ed.) at ch. 1.5 (NFPA-PR0014320); Ex. G (NFPA 25, 2002 ed.) at ch. 1.3 (NFPA-PR0020244); Ex. H (NFPA 30, 2003 ed.) at ch. 1.5 (NFPA-

PR0014664); Ex. I (NFPA 54, 2006 ed.) at ch. 1.4 (NFPA-PR0014798); Ex. J (NFPA 58, 2001 ed.) at ch. 1.1.3 (NFPA-PR0014963); Ex. K (NFPA 58, 2004 ed.) at ch. 1.5 (NFPA-PR0015087); Ex. L (NFPA 59, 2004 ed.) at ch. 1.4 (NFPA-PR0015220); Ex. M (NFPA 70, 1999 ed.) at art. 90-4 (NFPA-PR0015285); Ex. N (NFPA 70, 2005 ed.) at art. 90-4 (NFPA-PR0015939); Ex. O (NFPA 70, 2008 ed.) at art. 90-4 (NFPA-PR0016718); Ex. P (NFPA 70, 2014 ed.) at art. 90-4 (NFPA-PR0098088); Ex. Q (NFPA 72, 2002 ed.) at ch. 1.5 (NFPA-PR0018433); Ex. R (NFPA 99, 2005 ed.) at ch. 1.4 (NFPA-PR0018700); Ex. S (NFPA 101, 2000 ed.) at § 1.5 (NFPA-PR0018981); Ex. T (NFPA 101, 2003 ed.) at ch. 1.4 (NFPA-PR0019378); Ex. U (NFPA 101, 2006 ed.) at ch. 1.4 (NFPA-PR0019793); Ex. V (NFPA 704, 2007 ed.) at ch. 1.5 (NFPA-PR0020216); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at art. 90.4 (NFPA-PR0017560).

61. All 23 of NFPA’s standards include specific portions of text that do not necessarily set forth any binding legal obligation. *See* Supp. Pauley Decl. ¶¶ 25-29. More specifically, these portions include the following:

62. **Prefatory Notices:** All 23 of the NFPA standards include prefatory notices, disclaimers and copyright information, such as a “Notice and Disclaimer of Liability Concerning the Use of NFPA Documents.” Supp. Pauley Decl. ¶ 28(a), Ex. A (NFPA 1, 2003 ed.) at NFPA-PR0013033-34; Ex. B (NFPA 1, 2006 ed.) at NFPA-PR0013514-15; Ex. C (NFPA 10, 2002 ed.) at NFPA-PR0014071-72; Ex. D (NFPA 11, 2005 ed.) at NFPA-PR0014141-42; Ex. E (NFPA 12, 2005 ed.) at NFPA-PR0014242-43; Ex. F (NFPA 13, 2002 ed.) at NFPA-PR0014308-09; Ex. G (NFPA 25, 2002 ed.) at NFPA-PR0020238-39; Ex. H (NFPA 30, 2003 ed.) at NFPA-PR0014655-56; Ex. I (NFPA 54, 2006 ed.) at NFPA-PR0014789-90; Ex. J (NFPA 58, 2001 ed.) at NFPA-PR0014957-58; Ex. K (NFPA 58, 2004 ed.) at NFPA-PR0015080-81; Ex. L (NFPA 59, 2004 ed.) at NFPA-PR0015214-15; Ex. M (NFPA 70, 1999 ed.) at NFPA-PR0015266-67; Ex. N (NFPA 70,



2005 ed.) at NFPA-PR0015914-15; Ex. O (NFPA 70, 2008 ed.) at NFPA-PR0016695-96; Ex. P (NFPA 70, 2014 ed.) at NFPA-PR0098062-63; Ex. Q (NFPA 72, 2002 ed.) at NFPA-PR0018419-20; Ex. R (NFPA 99, 2005 ed.) at NFPA-PR0018686-67; Ex. S (NFPA 101, 2000 ed.) at NFPA-PR0018957-58; Ex. T (NFPA 101, 2003 ed.) at NFPA-PR0019356-57; Ex. U (NFPA 101, 2006 ed.) at NFPA-PR0019770-71; Ex. V (NFPA 704, 2007 ed.) at NFPA-PR0020211-12; Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at NFPA-PR0017536-37.

63. **History, Development, and Edition Information:** All 23 of the NFPA standards include a section describing the history and development of the standard. Supp. Pauley Decl. ¶ 28(b), Ex. A (NFPA 1, 2003 ed.) at 1-1 (NFPA-PR0013035); Ex. B (NFPA 1, 2006 ed.) at 1-1 (NFPA-PR0013516-17); Ex. C (NFPA 10, 2002 ed.) at 10-1 (NFPA-PR0014073); Ex. D (NFPA 11, 2005 ed.) at 11-1 (NFPA-PR0014143); Ex. E (NFPA 12, 2005 ed.) at 12-1 (NFPA-PR0014244); Ex. F (NFPA 13, 2002 ed.) at 13-1 to 13-2 (NFPA-PR0014310-11); Ex. G (NFPA 25, 2002 ed.) at 25-1 (NFPA-PR0020240); Ex. H (NFPA 30, 2003 ed.) at 30-1 to 30-2 (NFPA-PR0014657-58); Ex. I (NFPA 54, 2006 ed.) at 54-1 to 54-2 (NFPA-PR0014791-92); Ex. J (NFPA 58, 2001 ed.) at 58-1 (NFPA-PR0014959); Ex. K (NFPA 58, 2004 ed.) at 58-1 (NFPA-PR0015082); Ex. L (NFPA 59, 2004 ed.) at 59-1 (NFPA-PR0015216); Ex. M (NFPA 70, 1999 ed.) at 70-1 (NFPA-PR0015268); Ex. N (NFPA 70, 2005 ed.) at 70-1 (NFPA-PR0015916); Ex. O (NFPA 70, 2008 ed.) at 70-1 (NFPA-PR0016697); Ex. P (NFPA 70, 2014 ed.) at NFPA-PR0098064; Ex. Q (NFPA 72, 2002 ed.) at 72-1 (NFPA-PR0018421); Ex. R (NFPA 99, 2005 ed.) at 99-1 (NFPA-PR0018688); Ex. S (NFPA 101, 2000 ed.) at 101-1 (NFPA-PR0018959); Ex. T (NFPA 101, 2003 ed.) at 101-1 (NFPA-PR0019358); Ex. U (NFPA 101, 2006 ed.) at 101-1 (NFPA-PR0019772); Ex. V (NFPA 704, 2007 ed.) at 704-1 (NFPA-PR0020213); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at NFPA-PR0017538.

64. **Reference and Informational Notes:** Of the 23 NFPA standards, 19 also include informational notes throughout the text that provide context, background, cross-references, and other explanatory material, but they do not set forth any binding legal obligations. Many of these expressly state that the notes “are informational only and are not enforceable as requirements.” *E.g.*, Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at art. 90.5(C) at 70-23 (NFPA-PR0017561). For example, NFPA 70 (2011 ed.) provides the following helpful information: “Some cleaning and lubricating compounds can cause severe deterioration of many plastic materials used for insulating and structural applications in equipment.” *Id.* at art. 110.11 (Note 2) at 70-35 (NFPA-PR0017572). Informational notes appear throughout the main text of the standards (*i.e.*, not including the annexes). *See, e.g.*, Supp. Pauley Decl. ¶ 28(c), Ex. A (NFPA 1, 2003 ed.) at Table 60.2.2.1.(b) (Note 1) at 1-203 (NFPA-PR0013237); Ex. B (NFPA 1, 2006 ed.) at Table 60.2.6.5 (Note 1) at 1-238 (NFPA-PR0013753); Ex. C (NFPA 10, 2002 ed.) at Table 5.3.1 (Notes 1-3) at 10-11 (NFPA-PR0014083); Ex. D (NFPA 11, 2005 ed.) at Table 5.2.5.3.4 (Note) at 11-14 (NFPA-PR0014156); Ex. E (NFPA 12, 2005 ed.) at Table 5.3.2.2 (Note) at 12-17 (NFPA-PR0014260); Ex. F (NFPA 13, 2002 ed.) at Table 10.8.3.1.2.2 (Note) at 13-95 (NFPA-PR0014404); Ex. G (NFPA 25, 2002 ed.) at Table 11.1 (Note) at 25-31 (NFPA-PR0020270); Ex. I (NFPA 54, 2006 ed.) at Table 6.2(f) (Note) at 54-28 (NFPA-PR0014818); Ex. J (NFPA 58, 2001 ed.) at Table 2.2.2.2 (Notes 1-3) at 58-10 (NFPA-PR0014968); Ex. K (NFPA 58, 2004 ed.) at Table 5.2.4.2 (Notes) at 58-13 (NFPA-PR0015094); Ex. M (NFPA 70, 1999 ed.) at art. 90-2(a)(1) at 70-17 (NFPA-PR0015284); Ex. N (NFPA 70, 2005 ed.) at art. 230.95(C) (FPN Nos. 1-4) at 70-80 (NFPA-PR0015995); Ex. O (NFPA 70, 2008 ed.) at art. 430.26 (FPN) at 70-306 (NFPA-PR0017002); Ex. P (NFPA 70, 2014 ed.) at art. 300.20(B) (Informational Note) at 70-151 (NFPA-PR0098214); Ex. Q (NFPA 72, 2002 ed.) at Table 10.4.2.2 (Note 3) at 72-97 (NFPA-PR0018517); Ex. T (NFPA 101, 2003 ed.) at Table 8.3.4.2

(footnote 2) at 101-72 (NFPA-PR0019429); Ex. U (NFPA 101, 2006 ed.) at Table 8.3.4.2 (footnote †) at 101-77 (NFPA-PR0019848); Ex. V (NFPA 704, 2007 ed.) at Table 5.2 (footnote \*) at 704-7 (NFPA-PR0020219); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at art. 505.8 (Informational Note) at 70-402 (NFPA-PR0017939).

65. **Diagrams, Figures, and Illustrations:** Of the 23 NFPA standards, 14 also include figures that illustrate concepts in the text, but that do not dictate any legal obligations. These include, for example, Figure 220.1 of the 2011 edition of NFPA 70, which provides a graphical overview of the organization of Article 220. *See* Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at Figure 220.1 at 70-61 (NFPA-PR0017598). Similar figures and illustrations appear throughout the text. *See, e.g.*, Supp. Pauley Decl. ¶ 28(d), Ex. A (NFPA 1, 2003 ed.) at Figure 31.3.7.3.3(C) (NFPA-PR0013184); Ex. B (NFPA 1, 2006 ed.) at Figure 43.1.4.5.3 at 1-200 (NFPA-PR0013715); Ex. D (NFPA 11, 2005 ed.) at Figure 5.3.5.3.1 at 11-18 (NFPA-PR0014160); Ex. F (NFPA 13, 2002 ed.) at Figures 7.7.4.2.1(a), (b) at 13-36 (NFPA-PR0014345); Ex. I (NFPA 54, 2006 ed.) at Figure 12.6.2.1 at 54-85 (NFPA-PR0014875); Ex. J (NFPA 58, 2001 ed.) at Figure 8.2.10 at 58-63 (NFPA-PR0015021); Ex. M (NFPA 70, 1999 ed.) at Figure 250-2 at 70-81 (NFPA-PR0015347); Ex. N (NFPA 70, 2005 ed.) at Figure 250-126 at 70-113 (NFPA-PR0016028); Ex. O (NFPA 70, 2008 ed.) at FPN Figures 517.30 Nos. 1 & 2 at 70-431 (NFPA-PR0017127); Ex. P (NFPA 70, 2014 ed.) at Figure 516.4(C)(1) at 70-459 (NFPA-PR0098522); Ex. S (NFPA 101, 2000 ed.) at Figure 7.10.6.2 at 101-67 (NFPA-PR0019025); Ex. T (NFPA 101, 2003 ed.) at Figure 7.10.6.2.1 at 101-69 (NFPA-PR0019426); Ex. U (NFPA 101, 2006 ed.) at Figure 7.10.6.2.1 at 101-73 (NFPA-PR0019844); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at Informational Note Figure 505.9(C)(2) at 70-404 (NFPA-PR0017941).

66. **Examples:** Of the 23 NFPA standards, 18 include lists of examples or illustrative examples that do not dictate any legal obligations, *e.g.*, a list of examples of mobile homes not intended as a dwelling unit. *See* Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at art. 550.4(A) at 70-482 (NFPA-PR0018019). These examples appear throughout the text. *See, e.g.*, Supp. Pauley Decl. ¶ 28(e), Ex. A (NFPA 1, 2003 ed.) at ch. 3.3.61.6 at 1-28 (NFPA-PR0013062); Ex. B (NFPA 1, 2006 ed.) at ch. 3.3.163 at 1-37 (NFPA-PR0013552); Ex. D (NFPA 11, 2005 ed.) at ch. 3.3.4 at 11-7 (NFPA-PR0014149); Ex. F (NFPA 13, 2002 ed.) at ch. 8.16.2.4.7.1 at 13-79 (NFPA-PR0014388); Ex. G (NFPA 25, 2002 ed.) at ch. 5.3.3.1 at 25-13 (NFPA-PR0020252); Ex. J (NFPA 58, 2001 ed.) at ch. 2.2.6.3(1) at 58-12 (NFPA-PR0014970); Ex. K (NFPA 58, 2004 ed.) at ch. 5.2.8.2(C)(1) at 58-15 (NFPA-PR0015096); Ex. M (NFPA 70, 1999 ed.) at art. 551-73(c) at 70-419 (NFPA-PR0015685); Ex. N (NFPA 70, 2005 ed.) at art. 352.26 at 70-191 (NFPA-PR0016106); Ex. O (NFPA 70, 2008 ed.) at art. 518.2(A) at 70-443 (NFPA-PR0017139); Ex. P (NFPA 70, 2014 ed.) at art. 551.73(C) at 70-525 (NFPA-PR0098588); Ex. Q (NFPA 72, 2002 ed.) at ch. 3.3.43.19 at 72-17 (NFPA-PR0018437); Ex. R (NFPA 99, 2005 ed.) at ch. 4.3.3.1.2 at 99-25 (NFPA-PR0018712); Ex. S (NFPA 101, 2000 ed.) at Table 22.3.8 (footnote ‡) at 101-183 (NFPA-PR0019141); Ex. T (NFPA 101, 2003 ed.) at Table 22.3.8 (footnote ‡) at 101-194 (NFPA-PR0019551); Ex. U (NFPA 101, 2006 ed.) at Table 22.4.4.11 (footnote †) at 101-207 (NFPA-PR0019978); Ex. V (NFPA 704, 2007 ed.) at Table 6.2 at 704-8 to 704-9 (NFPA-PR0020220-21); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at art. 552.47 at 70-508 (NFPA-PR0018045).

67. **Informational Annexes:** All 23 of the NFPA standards include informational annexes that come in a variety of forms. Many are purely explanatory, *e.g.*, Annex A “Explanatory Material,” which states “Annex A is not a part of the requirements of this NFPA document but is included for informational purposes only. This annex contains explanatory material numbered to

correspond with the applicable text paragraphs.” Supp. Pauley Decl. Ex. F at Annex A (NFPA 13 (2002 ed.)). Some of these are only binding if *specifically* incorporated by reference, e.g., Annex H “Administration and Enforcement,” which states that it is “not a part of the requirements of this NFPA document and is included for informational purposes only . . . unless specifically adopted by the local jurisdiction adopting the National Electric Code®.” *Id.* Ex. P at Annex H (NFPA 70 (2014 ed.)). These examples are not unique, all of the standards include informational annexes. Supp. Pauley Decl. ¶ 28(f), Ex. A (NFPA 1, 2003 ed.) at Annexes A-K at 1-320 to 1-449 (NFPA-PR0013354-483); Ex. B (NFPA 1, 2006 ed.) at Annexes A-P at 1-357 to 1-523 (NFPA-PR0013872-4038); Ex. C (NFPA 10, 2002 ed.) at Annexes A-J at 10-17 to 10-53 (NFPA-PR0014089-125); Ex. D (NFPA 11, 2005 ed.) at Annexes A-I at 11-36 to 11-80 (NFPA-PR0014178-222); Ex. E (NFPA 12, 2005 ed.) at Annexes A-H at 12-25 to 12-52 (NFPA-PR0014268-95); Ex. F (NFPA 13, 2002 ed.) at Annexes A-E at 13-198 to 13-315 (NFPA-PR0014507-624); Ex. G (NFPA 25, 2002 ed.) at Annexes A-E at 25-41 to 25-109 (NFPA-PR0020280-348); Ex. H (NFPA 30, 2003 ed.) at Annexes A-H at 30-75 to 30-111 (NFPA-PR0014731-67); Ex. I (NFPA 54, 2006 ed.) at Annexes A-L at 54-111 to 54-151 (NFPA-PR0014901-41); Ex. J (NFPA 58, 2001 ed.) at Annexes A-J at 58-78 to 58-97 (NFPA-PR0015036-15055); Ex. K (NFPA 58, 2004 ed.) at Annexes A-K at 58-84 to 58-104 (NFPA-PR0015165-85); Ex. L (NFPA 59, 2004 ed.) at Annexes A-F at 59-31 to 59-40 (NFPA-PR0015246-55); Ex. M (NFPA 70, 1999 ed.) at Appendices A-E at 70-571 to 70-619 (NFPA-PR0015835-881); Ex. N (NFPA 70, 2005 ed.) at Annexes A-G at 70-640 to 70-737 (NFPA-PR0016555-652); Ex. O (NFPA 70, 2008 ed.) at Annexes A-H at 70-686 to 70-784 (NFPA-PR0017382-480); Ex. P (NFPA 70, 2014 ed.) at Annexes A-J at 70-772 to 70-867 (NFPA-PR0098835-930); Ex. Q (NFPA 72, 2002 ed.) at Annexes A-F at 72-111 to 72-227 (NFPA-PR0018531-647); Ex. R (NFPA 99, 2005 ed.) at

Annexes A-G at 99-124 to 99-238 (NFPA-PR0018811-925); Ex. S (NFPA 101, 2000 ed.) at Annexes A-B at 101-264 to 101-348 (NFPA-PR0019222-306); Ex. T (NFPA 101, 2003 ed.) at Annexes A-B at 101-276 to 101-359 (NFPA-PR0019633-716); Ex. U (NFPA 101, 2006 ed.) at Annexes A-B at 101-301 to 101-389 (NFPA-PR0020072-160); Ex. V (NFPA 704, 2007 ed.) at Annexes A-G at 704-12 to 704-20 (NFPA-PR0020224-32); Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at Informational Annexes A-I at 70-727 to 70-829 (NFPA-PR0018264-366).

68. **Proposal Forms:** NFPA's standards also generally include information regarding the proposal and committee process for NFPA standards, as well as proposal forms so the reader can submit suggestions for future editions. This information and forms do not set forth any binding legal obligations. Supp. Pauley Decl. ¶ 28(g). *See, e.g., id.* Ex. A (NFPA 1, 2003 ed.) at NFPA-PR0013508-10; Ex. B (NFPA 1, 2006 ed.) at NFPA-PR0014067-69; Ex. D (NFPA 11, 2005 ed.) at NFPA-PR0014238-40; Ex. E (NFPA 12, 2005 ed.) at NFPA-PR0014304-06; Ex. H (NFPA 30, 2003 ed.) at NFPA-PR0014785-87; Ex. I (NFPA 54, 2006 ed.) at NFPA-PR0014953-55; Ex. K (NFPA 58, 2004 ed.) at NFPA-PR0015210-12; Ex. L (NFPA 59, 2004 ed.) at NFPA-PR0015262-64; Ex. N (NFPA 70, 2005 ed.) at NFPA-PR0016691-93; Ex. O (NFPA 70, 2008 ed.) at NFPA-PR0017523-34 (and membership information); Ex. P (NFPA 70, 2014 ed.) at NFPA-PR0098986-89; Ex. R (NFPA 99, 2005 ed.) at NFPA-PR0018953; Ex. T (NFPA 101, 2003 ed.) at NFPA-PR0019766-68; Ex. U (NFPA 101, 2006 ed.) at NFPA-PR0020207-09; Ex. V (NFPA 704, 2007 ed.) at NFPA-PR0020234-36; Dubai Decl. Ex. A (NFPA 70, 2011 ed.) at NFPA-PR0018414-17. PRO has posted these forms as well. *See* Wise Decl. ¶ 173, Ex. 172.

69. Many standards incorporate other standards by reference, which may in turn reference other standards. Supp. Pauley Decl. Ex. B (NFPA 1, 2006 ed.) at ch. 5.3.4 at 1-49 (NFPA-PR0013562) (providing that certain structures must comply with provisions in NFPA

101); Ex. U (NFPA 101, 2006 ed.) at ch. 9.1.2 at 101-84 (NFPA-PRO0019855) (dictating that “[e]lectrical wiring and equipment shall [generally] be in accordance with NFPA 70, *National Electrical Code*”).

ASHRAE Standards (and Portions Thereof) That Do Not Impose Legal Duties

70. All 3 of ASHRAE’s standards at issue, which are three different versions of ASHRAE Standard 90.1, include large portions of the text that are not necessary for compliance with the standard and therefore do not set forth any binding legal obligation in instances where the standard is incorporated by reference. These portions include the following:

71. **Foreword:** All 3 of the ASHRAE standards include a foreword, which does not set forth any binding legal obligations. In fact, the forewords open by stating “[t]his foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard.” The forewords go on to provide, *inter alia*, historical information about the development of the Standard over time. Declaration of Steve Comstock, previously filed at Dkt. 155-5, (“Comstock Decl.”) ¶ 7, Ex. 1 (ASHRAE 90.1-2004) at 4; Supplemental Declaration of Stephanie Reiniche (“Supp. Reiniche Decl.”) ¶ 2, Ex. 1 (ASHRAE 90.1-2007) at 6, and Ex. 2 (ASHRAE 90.1-2010) at 6.

72. **“Informative Appendix E”:** All 3 of the ASHRAE standards include what the standards refer to as “Informative Appendix E.” The appendix opens with a disclaimer stating: “This appendix is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard.” The appendix contains a variety of general information, including contact information for certain trade associations that operate in industries related to the standard. Comstock Decl. ¶ 7, Ex. 1 (ASHRAE 90.1-2004 at 165-66);

Supp. Reiniche Decl. ¶ 2, Ex. 1 (ASHRAE 90.1-2007) at 170-71, and Ex. 2 (ASHRAE 90.1-2010) at 201-02.

73. **“Informative Appendix F”**: All 3 of the ASHRAE standards include what the standards refer to as “Informative Appendix F.” The appendix opens with a disclaimer stating: “This appendix is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard.” The appendix contains a log tracking changes to the standard over time. Comstock Decl. ¶ 7, Ex. 1 (ASHRAE 90.1-2004) at 167-69; Supp. Reiniche Decl. ¶ 2, Ex. 1 (ASHRAE 90.1-2007) at 172-75, and Ex. 2 (ASHRAE 90.1-2010) at 203-10.

74. **“Informative Appendix G”**: Two of the ASHRAE standards include what the standards refer to as “Informative Appendix G.” The appendix opens with a disclaimer stating: “This appendix is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard.” The appendix contains general information on multiple different ways to track energy efficiency with regard to different aspects of building construction. Comstock Decl. ¶ 7, Ex. 1 (ASHRAE 90.1-2004) at 168-80; Supp. Reiniche Decl. ¶ 2, Ex. 1 (ASHRAE 90.1-2007) at 175-185.

75. **Appendix B and D—Non-U.S. Data in Accompanying Tables**: All 3 of the ASHRAE standards include an Appendix B and an Appendix D. The appendices include tables on general climate data for the United States, Canada, and various foreign countries. Comstock Decl. ¶ 7, Ex. 1 (ASHRAE 90.1-2004) at 110-21, 131-64; Supp. Reiniche Decl. ¶ 2, Ex. 1 (ASHRAE 90.1-2007) at 114-16 and 148-69, and Ex. 2 (ASHRAE 90.1-2010) at 144-46 and 179-200. While data about the United States climate may be helpful to a reader for purposes of



understanding and applying the standards, the data on foreign climates would not be necessary for compliance with the standard within the United States.

76. **Informational Notes and Policy Statements:** All 3 ASHRAE standards also include informational notes that have nothing to do with requirements to comply with the standards. These include “Instructions For Submitting a Proposed Change to the Standard,” a form for submitting proposed changes, instructions for electronic submission of comments, a brief description of the ASHRAE organization, and a “Policy Statement” laying out ASHRAE’s general position and goals concerning the environmental impact of its activities. Comstock Decl. ¶ 7, Ex. 1 (ASHRAE 90.1-2004) at 181-89; Supp. Reiniche Decl. ¶ 2, Ex. 1 (ASHRAE 90.1-2007) at 189-92, and Ex. 2 (ASHRAE 90.1-2010) at 225-28.

**IV. PRO’S CONDUCT HARMS PLAINTIFFS’ ACTUAL AND POTENTIAL MARKETS; AND AN INJUNCTION IS NECESSARY**

**A. Plaintiffs Distribute Their Standards, Provide Free Read-Only Access, And Other Informational Resources**

Plaintiffs’ Sales, Licensing, and Derivative Works

77. Plaintiffs sell their standards, including the Works, in a variety of formats and for a reasonable cost to industry professionals and tradespeople (and the companies and organizations for which they work) who then use these standards in the course of their business. Supp. Pauley Decl. ¶¶ 34, 43; Reiniche Decl., ¶¶ 17-18; James Thomas Decl. ¶¶ 45-48; *see also* Pauley Decl. ¶ 13; Declaration of James Golinveaux, filed at Dkt. 118-5 (“Golinveaux Decl.”) ¶ 10.

78. Plaintiffs’ sell their standards individually for prices that range from \$25 to \$200, or as a part of a membership or subscription. Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶¶ 84 (ASTM), 92 (NFPA), 99 (ASHRAE)).

79. Plaintiffs depend on the sale of standards to fuel their overall mission-driving work. The vast majority of that revenue is from the sale of codes and standards, including those that have

been incorporated by reference and posted by PRO. Supp. Pauley Decl. ¶ 33; Supp. Reiniche Decl. ¶ 4; James Thomas Decl. ¶¶ 37-38; Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶¶ 107-08).

80. ASTM sells its standards in books and as individual standards. Wise Decl. ¶¶ 158-161, Exs. 157-160. ASTM derives revenue from not only the initial publication of a given standard but also from revised, reapproved, and reissued versions of standards. *Id.*

81. For example, B580 issued in 1979 has been reapproved and reissued in its original form every five years since 1979. Wise Decl. ¶ 160, Ex. 159. This standard originally appeared in ASTM's Annual Book of ASTM Standards in 1980. Wise Decl. ¶ 9, Ex. 8. The latest version of this standard still appears in ASTM's 2019 Annual Book of ASTM Standards. Wise Decl. ¶ 156, Ex. 155; Wise Decl. ¶ 161, Ex. 160, at ASTM103529, Section 02 Volume 05; Wise Decl. ¶ 159, Ex. 158 at ASTM103291, Section 02 Volume 05.

82. NFPA also earns significant revenue from licensing its standards to other companies and organizations to use in their products and services, for example, derivative works like checklists based on the standards. Supp. Pauley Decl. ¶ 36.

83. Plaintiffs' revenue from complementary and downstream products and services like e-learning and in person training courses and other derivative works is also dependent on their copyrights in their standards because they market these products as including copies of the published material. James S. Thomas Decl. ¶¶ 4, 5-9; Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶¶ 109-11, 145).

84. As the copyright owners, Plaintiffs' ability to include its standards as reference material for these training courses gives them a competitive advantage over competitors, such as third-party training programs. James S. Thomas Decl. ¶ 10. This advantage is "a significant

driver” of these sources of revenue “is the provision of the protected publications in, for example, trainings and seminars.” Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶ 146)).

Plaintiffs’ Read-Only Access (at No Cost to the Reader) and Other Information

85. Plaintiffs also provide read-only access to the Works—excluding certain of the Works that are simply not incorporated by reference as claimed by PRO—on their websites, and sometimes linked through other websites, such as local and state government websites. This is provided at no cost to the user. Supp. Pauley Decl. ¶¶ 40-41, 44; Reiniche Decl., ¶ 19; O’Brien Decl. ¶ 60; Wise Decl. ¶ 157, Ex. 156.

86. Plaintiffs’ provision of free read-only access to and other resources for researching their standards serves Plaintiffs’ overall missions by providing a resource for individuals to educate themselves as to the contents of standards, including standards that have been incorporated by reference. Supp. Pauley Decl. ¶ 43, 45; Supp. Reiniche Decl. ¶ 3; Declaration of James S. Thomas, dated October 4, 2019, filed concurrently herewith, (“James S. Thomas Decl.”) ¶ 12.

87. Plaintiffs’ provision of free read-only access and research tools also benefits the public, because they can be sure of the authenticity and accuracy of the copy of the standard they are reading. Supp. Reiniche Decl. ¶ 3; O’Brien Decl. ¶¶ 52-53; Supp. Pauley Decl. ¶ 39.

88. Although industry professionals and tradespeople who purchase Plaintiffs’ standards to use in the course of their work might reference Plaintiffs’ free access websites, the carefully controlled read-only environment do not provide a substitute for purchasing a copy of the Works. James S. Thomas Decl. ¶ 14; Supp. Pauley Decl. ¶ 45. Rather, Plaintiffs’ online copies serve those “parties that are interested in or affected by [Plaintiffs’ standards], but who do not necessarily need a digital or hardcopy of the standards.” Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶ 86).

89. Plaintiffs are not harmed by the provision of these free access websites because the users who visit them engage with their other products and services in furtherance of Plaintiffs' overall missions and because the read-only format prevents unauthorized distribution. Supp. Pauley Decl. ¶ 45; Supp. Reiniche Decl. ¶ 4; James S. Thomas Decl. ¶ 15.

90. NFPA has also developed additional resources for researching that consolidate information regarding the jurisdictions that have incorporated NFPA's standards by reference into local, state, or federal laws or regulations. These resources include the NEC Adoptions Map and CodeFinder™, which serves the "purpose of creating general public awareness of some of the jurisdictions where [AHJs] may require the use of NFPA codes and/or standards." Supp. Pauley Decl. ¶¶ 46-47.

**B. PRO's Posting Of Its Versions Of Plaintiffs' Works Online Is Substitutional And Harmful**

PRO's Conduct Threatens Plaintiffs' Actual and Derivative Markets

91. The expert report of John Jarosz concluded that PRO's activities would threaten the market both for Plaintiffs' standards and for derivative works, including future standards, trainings and seminars. Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶¶ 85, 92, 100, 130-49).

92. Anyone visiting PRO's postings of the Works on the Internet Archive website can download, copy, print, and redistribute the entirety of Plaintiffs' Works, which are available without restriction in multiple formats, such as Full Text and PDF. Declaration of Christopher Butler, of Internet Archive ("Butler Decl.") ¶ 9; Supp. Pauley Decl. ¶ 31; Wise Decl. ¶ 168, Ex. 167.

93. The individuals and entities who use PRO's unrestricted versions of the Plaintiffs' standards include the same sorts of industry professionals and tradespeople, such as engineers, as would otherwise typically obtain copies of Plaintiffs' standards directly from Plaintiffs. Wise

Decl. ¶ 174, Ex. 173 at PRO\_00267293 (engineer asking after remand from the D.C. Circuit, “Does Friday’s decision mean you can update the site?”), PRO\_00267241 (engineering firm saying it heard about PRO from a “colleague” and asking “How might we access the documents you offer?”); Wise Decl. ¶ 165, Ex. 164 at Interrog. 22.

94. PRO’s versions of Plaintiffs’ standards compete directly with Plaintiffs’ standards in the market because if the professionals and tradespeople are able to access and download nearly identical standards without cost through PRO’s postings to the Internet Archive, they will not buy Plaintiffs’ publications or use their free access websites. PRO’s postings to the Internet Archive therefore substitute for both sales of Plaintiffs’ Works and use of Plaintiffs’ free access websites. Supp. Pauley Decl. ¶ 35; Supp. Reiniche Decl. ¶ 5; James S. Thomas Decl. ¶ 16; Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶¶ 109-111, 149).

95. PRO’s provision of unrestricted, downloadable PDF and HTML copies of Plaintiffs’ works competes directly with not only sale of the Works but also ancillary products such as training courses that include copies of the Works. James S. Thomas Decl. ¶ 16; Rubel Decl. ¶ 4, Ex. 1 (Jarosz Rep. ¶¶ 131-41, 145-49).

96. The harm resulting from PRO’s posting and dissemination of unrestricted copies of ASTM’s standards for free extends beyond PRO’s impact on the sale of the same version of the ASTM work PRO copied. Prior versions of ASTM’s standards can serve as a substitute for new ones because significant portions—and in some instances the entire standard—may remain unchanged from edition to edition. As a result, for many users, prior versions of ASTM’s works may be a perfect or near perfect substitute that interferes with the market for the current version of ASTM’s standards. James S. Thomas Decl. ¶ 17.

97. A simple comparison between views of ASTM Standards in the ASTM reading room and data regarding downloads and access to the ASTM Standards on the PRO website and the Internet Archive website shows the damaging impact on the marketplace for ASTM’s works.



Wise Decl. ¶ 158, Ex. 157 at ASTM103291.

ASTM Reading Room Results						
	2013	2014	2015	2016	2017	2018
Standards Viewed:						

98. PRO’s reproduction and display of ASTM’s Works dwarfs ASTM’s Reading Room impressions. PRO’s download data and access data was only available up to 2014. Wise Decl. ¶ 163, Ex. 162 at PRO\_00245530; Wise Decl. ¶ 164, Ex. 163 at PRO\_00232651; Wise Decl. ¶ 152, Ex. 151.

Standard	Edition	PRO Website Views	Downloads from PRO Website	Internet Archive Views	Impact
<b>Total of Standards</b>		<b>48,985</b>	<b>15,451</b>	<b>108,992</b>	<b>173,428</b>
A36	1977a <sup>e</sup>	334	187	1,304	1,825
A36/A36M	1997a <sup>e1</sup>	321	120	615	1,056
A82	1979	308	83	884	1,275
A106/A106 M	2004b	326	0	0	326
A184	1979	264	25	163	452
A185	1979	290	179	2,616	3,085
A203/A203 M	1997	253	40	149	442
A242	1979	293	65	367	725
A285	1978	295	47	175	517
A307	1978 <sup>e</sup>	349	87	417	853
A325	1979	333	97	479	909
A333/A 333M	1994	492	0	0	492
A369/A 369M	1992	245	0	0	245
A370	1977 <sup>e2</sup>	392	869	10,391	11,652
A441	1979	272	49	368	689
A449	1978a	290	50	257	597
A475	1978(1984) <sup>e1</sup>	279	91	508	878
A490	1979	290	87	357	734
A496	1978	285	49	390	724
A497	1979	284	130	973	1,387

Standard	Edition	PRO Website Views	Downloads from PRO Website	Internet Archive Views	Impact
A500	1978	293	82	325	700
A501	1976	267	64	295	626
A502	1976	281	133	781	1,195
A514	1977	272	62	315	649
A522/A 522M	1995b	277	0	0	277
A539	1990a	237	0	0	237
A570	1979	293	75	364	732
A572	1979	295	50	222	567
A588	1979a	292	36	202	530
A611	1972(1979)	266	84	638	988
A615	1979	369	102	497	968
A616	1979	243	32	288	563
A617	1979	246	51	293	590
A633	1979a	288	59	396	743
B16	1992	229	66	0	295
B21	1983b	248	71	460	779
B21	1996	259	0	0	259
B42	1996	277	0	0	277
B68	1995	288	0	0	288
B75	1997	311	0	0	311
B85	1984	299	120	1,164	1,583
B88	1996	270	0	0	270
B96	1993	238	0	0	238
B111	1995	281	0	0	281
B122/B 122M	1995	238	0	0	238
B124	1996	280	0	0	280
B209	1996	321	197	1,638	2,156
B224	1980 <sup>e1</sup>	259	57	274	590
B283	1996	254	0	0	254
B315	1993	209	0	0	209
B557	1984	343	85	961	1,389
B580	1979	257	138	1,131	1,526
B694	1986	219	54	247	520
C5	1979(1997)	231	45	237	513
C150	1999a	206	101	561	868
C177	1997	330	43	340	713
C236	1989(1993) <sup>e1</sup>	252	74	354	680
C330	1999	330	157	1,212	1,699
C509	1984	240	53	721	1,014
C518	1991	282	74	318	674
C516	1980(1996) <sup>e1</sup>	219	68	278	565
C549	1981(1995) <sup>e1</sup>	227	83	507	817
C564	1970(1982)	262	42	663	967
D86	2007	466	75	393	934
D129	1995	241	28	118	387
D396	1998	277	47	419	743
D512	1989(1999)	299	87	580	966

Standard	Edition	PRO Website Views	Downloads from PRO Website	Internet Archive Views	Impact
D611	1982(1998)	297	35	355	687
D665	1998 <sup>e1</sup>	253	76	359	688
D814	1995	211	41	147	399
D975	2007	426	159	861	1,446
D975	1998b	232	89	923	1,244
D1217	1993(1998)	245	31	252	528
D1246	1995(1999)	250	27	149	426
D1253	1986(1996)	258	64	396	718
D1266	1998	281	34	381	696
D1298	1999	347	168	786	1,301
D1335	1967(1972)	233	159	1,084	1,476
D1412	1993(1997)	253	83	495	831
D1480	1993(1997)	220	30	281	531
D1481	1993(1997)	252	35	286	573
D1518	1985(1998) <sup>e1</sup>	255	143	1,009	1,407
D1535	1989	218	100	454	772
D1552	1995	268	41	637	946
D1688	1995	233	41	299	573
D1785	1986	315	199	1,294	1,808
D1835	1997	295	74	814	1,183
D1890	1996	206	26	164	396
D1943	1996	213	17	184	414
D1945	1996	218	104	1,653	1,975
D1946	1990(1994) <sup>e1</sup>	261	34	786	1,081
D2013	1986(1994)	333	134	1,071	1,538
D2015	1996	351	131	2,409	2,891
D2036	1998	245	32	404	681
D2163	1991(1996)	313	58	841	1,212
D2216	1998	305	189	1,952	2,446
D2234	1998	253	63	835	1,151
D2460	1997	194	35	134	363
D2502	1992(1996)	227	24	350	601
D2503	1992(1997)	226	52	294	572
D2597	1994(1999)	232	36	160	428
D2622	1998	265	45	278	588
D2724	1987(1995)	256	155	1,183	1,594
D2777	1998	217	26	150	393
D2879	1997	243	31	391	665
D2986	1995a(1999)	230	43	399	672
D3120	1996	226	22	205	453
D3173	1987(1996)	285	79	924	1,288
D3178	1989(1997)	231	33	313	577
D3236	1988(1999)	259	101	729	1,089
D3246	1996	233	60	556	849
D3286	1996	227	138	582	947
D3371	1995	183	20	142	345
D3454	1997	198	45	147	390



Standard	Edition	PRO Website Views	Downloads from PRO Website	Internet Archive Views	Impact
D3588	1998	330	143	964	1,437
D3697	1992(1996)	230	32	138	400
D4177	1995	287	104	603	994
D4239	1997 <sup>e1</sup>	279	88	834	1,201
D4268	1993	256	96	572	924
D4294	1998	289	116	654	1,059
D4329	1999	280	0	0	280
D4809	1995	258	74	707	1,039
D4891	1989(1994) <sup>e1</sup>	326	19	102	447
D4986	1998	245	0	0	245
D5257	1997	214	28	228	470
D5373	1993(1997)	274	208	1,064	1,546
D5489	1996a	265	148	537	950
D5673	1996	253	25	153	431
D5865	1998a	290	303	2,161	2,754
D6216	1998	202	42	410	654
D6228	1998	261	56	560	877
D6420	1999	199	44	188	431
D6503	1999	222	61	428	711
E11	1995	268	82	273	623
E23	1982	237	411	3,059	3,707
E72	1980	195	141	1,111	1,447
E96	1995	239	168	1,225	1,632
E145	1994 <sup>e1</sup>	211	188	1,160	1,559
E169	1987	156	61	394	611
E185	1982	161	74	231	466
E260	1996	201	47	355	603
E283	1991(1999)	219	141	882	1,242
E408	1971	183	118	558	859
E424	1971	174	93	583	850
E606	1980	220	369	1,220	1,809
E681	1985	163	99	982	1,244
E695	1979(1997) <sup>e1</sup>	148	39	346	533
E711	1987(1992)	190	139	699	1,028
E773	1997	153	43	245	441
E774	1997	185	92	1,030	1,307
E776	1987(1992)	157	57	415	629
E885	1988	142	62	260	464
E1337	1990(1996)	155	60	582	797
F462	1979(1999)	200	0	0	200
F478	1992(1999)	148	53	275	476
F631	1980(1985)	135	36	214	385
F631	1993	126	60	218	404
F682	1982a(1988)	202	43	180	425
F715	1981(1986)	140	54	204	398
F715	1995	132	47	173	352
F722	1982(1988)	223	54	230	507

Standard	Edition	PRO Website Views	Downloads from PRO Website	Internet Archive Views	Impact
F808	1983(1988) <sup>e1</sup>	139	33	85	257
F1003	1986(1992)	154	36	139	329
F1006	1986(1997)	159	31	126	316
F1007	1986(1996) <sup>e1</sup>	179	41	153	373
F1014	1992	164	37	170	371
F1020	1986(1996) <sup>e1</sup>	160	40	159	359
F1120	1987(1998)	223	36	284	543
F1121	1987(1998)	231	43	325	599
F1122	1987(1998)	167	48	284	499
F1123	1987(1998)	213	78	268	559
F1139	1988(1998)	203	57	218	478
F1155	1998	215	225	702	1,142
F1172	1988(1998)	161	38	190	389
F1173	1995	204	56	235	495
F1199	1988(1998)	185	41	271	497
F1200	1988(1998)	187	49	0	236
F1201	1988(1998)	154	48	157	359
F1271	1990(1995) <sup>e1</sup>	145	52	137	334
F1273	1991(1996) <sup>e1</sup>	197	38	229	464
F1321	1992	233	73	642	948
F1323	1998	179	29	114	322
F1471	1993	158	40	323	521
F1546/F 1546M	1996	164	28	215	407
F1548	1994	173	45	165	383
F1951	1999	218	0	0	218
G21	1990	225	161	1,441	1,827
G151	1997	225	229	1,000	1,454
G154	2000a	234	583	3,065	3,882

99. The cumulative impact of PRO’s reproduction and display of ASTM’s standards on its own website and on Internet Archive represents ██████████ ASTM’s total views across all six years combined. *Compare* Wise Decl. ¶ 158, Ex. 157 at ASTM103291, *with* Wise Decl. ¶ 163, Ex. 162 at PRO\_00245530 *and* Wise Decl. ¶ 164, Ex. 163 at PRO\_00232651.

100. With respect to NFPA, revenue is somewhat cyclical with publications, but in recent years, NFPA’s revenue from the sale of standards has been declining. NFPA attributes this decline, at least in part, to PRO’s making copies of NFPA’s standards widely available, including

for use by those same industry professionals who would otherwise purchase copies or digital subscription access. Supp. Pauley Decl. ¶ 38.

101. NFPA’s licenses likely would lose significant value if the licensees or their customers could obtain the same material from PRO in digital format, without cost, and without restrictions on further dissemination. Supp. Pauley Decl. ¶ 36.

102. A review of the Internet Archive websites to which PRO posted its versions of Plaintiffs’ Works reveals that the 2011 National Electrical Code has been “View[ed],” which includes being accessed or downloaded, 40,151 times since originally uploaded. Supp. Pauley Decl. ¶ 31; Wise Decl. ¶ 168, Ex. 167 at 5. This is an increase of nearly 10,000 in the 13 months since PRO has reposted this standard. SMF ¶ 242 (NFPA’s 2011 NEC was downloaded 30,350 times from the Internet Archive website) (citing Rubel Decl. ¶ 5, Ex. 2 (Rule 30(b)(6) Dep. of Public Resource at 254:14-256:16)); Rubel Decl. ¶ 43, Ex. 39 (Ex. 51 to Rule 30(b)(6) Dep. of Public Resource).

PRO’s Conduct Threatens Further Harm from Widespread Anonymous Dissemination

103. The Internet Archive website is among the top 300 most-visited websites in the world by alexa.com rankings and millions of people visit the Internet Archive every day. *See* Butler Decl. ¶ 4.

104. Neither PRO nor the Internet Archive keeps information regarding the individuals and entities that download and use PRO’s versions of Plaintiffs’ Works or the reasons that they do so. PRO has “adopted a policy of not talking to its users and not answering any questions or asking questions” of those users regarding Plaintiffs’ Works. Wise Decl. ¶ 165, Ex. 164 at Interrog. 23. Likewise, the Internet Archive does not keep records identifying information regarding the individuals who use or download PRO’s versions of Plaintiffs’ Standards. Butler Decl. ¶¶ 4, 9

(“as a general matter we avoid keeping the IP (Internet Protocol) addresses of our readers” and “[aside from counting the number of users] Internet Archive does not otherwise monitor how users view, access, download, or otherwise use the content posted on the websites”).

105. Accordingly, PRO’s download information is under-inclusive because it fails to account for versions of its standards re-posted by PRO’s users. For example, Scribd.com is a subscription service in which users must sign up for premium access to view beyond the PRO cover page. Wise Decl. ¶ 155, Ex. 154.



106. The open publishing forum at Scribd.com contains dozens of ASTM works bearing the PRO cover sheet. Wise Decl. ¶ 154, Ex. 153.

107. PRO’s postings threaten Plaintiffs’ ability to control the further dissemination and use of its standards. Because PRO offers unrestricted and anonymous access to standards in multiple formats, Plaintiffs cannot easily track down those individuals who use PRO’s versions of NFPA’s standards for their commercial businesses, or for sale to other individuals and entities. Supp. Pauley Decl. ¶ 37.

**C. PRO Does Not Make Use of Internet Archive’s Features That Would Protect Plaintiffs’ Standards**

108. Although Internet Archive has the functionality to provide access to books through “borrowing,” which allows registered users to “borrow books for two weeks, after which the loaned item expires and is removed from the user’s device,” PRO does not use this function. Butler Decl. ¶ 5.

109. Although Internet Archive has the functionality to offer access to the blind and print disabled in Digital Accessible Information System (DAISY) format protected by encryption and accessible through a key provided by the Library of Congress National Library Service to residents of the United States and American citizens abroad, PRO offers DAISY format *without* any encryption. Butler Decl. ¶ 6.

**D. Injunctive Relief Is Necessary**

110. PRO has and will continue to post versions of additional standards owned by Plaintiffs if not enjoined. For example, PRO posted the 2017 edition of the NEC in January 2019. Supp. Pauley Decl. ¶ 30; Wise Decl. ¶ 168, Ex. 167 at 6.

111. PRO has limited financial resources available to pay any damages award because it is dependent on fundraising for its activities. PRO Answer, Dkt. 21 at ¶¶ 46-47 (“[nearly] all of PRO’s funding comes from charitable donations”). PRO describes itself as a “charity.” Wise Decl. ¶ 165, Ex. 164 at Interrog. 22.

112. At the initial summary judgment hearing, when asked what would be an appropriate remedy, counsel for PRO responded “I am not able to say.” Transcript of Hearing on Motion for Summary Judgment, Dkt. 173 at 133:16 (Sept. 12, 2016).

Dated: October 7, 2019

Respectfully submitted,

/s/ J. Kevin Fee

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**CERTIFICATE OF SERVICE**

I hereby certify that on October 7, 2019, the foregoing document was filed with the clerk of this Court via the CM/ECF system and served on counsel of record via email, including:

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/s/ J. Kevin Fee

J. Kevin Fee



**MATERIAL UNDER SEAL DELETED**

**JA05121-JA06943**

**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/  
Counter-Plaintiff.

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

Page 290 of 395

Filed: 01/20/2023

Document #1982413

USCA Case #22-7063

**SUPPLEMENTAL DECLARATION OF STEPHANIE REINICHE**

I, Stephanie Reiniche, declare as follows:

1. I am currently employed by the American Society of Heating, Refrigerating, and Air Conditioning Engineers (“ASHRAE”) as its Director of Technology. I have been employed by ASHRAE since 2003. Based on the information known to me as a result of the duties and responsibilities of my position, as well as information I have gathered from relevant ASHRAE personnel and staff, I have personal knowledge of the facts set forth herein and could and would testify competently thereto if called as a witness.

2. The specific ASHRAE standard that I understand to be at issue here, Standard 90.1, pertains to energy efficiency in commercial and high-rise residential buildings. Standard 90.1 is under “continuous maintenance” by ASHRAE, which means that a new version of the standard is released every three years. I understand that in this litigation, three versions of Standard 90.1 are at issue: the 2004, 2007, and 2010 versions. Attached to this declaration are a true and correct copy of Standard 90.1-2007 (attached as **Exhibit 1**) and Standard 90.1-2010 (attached as **Exhibit 2**).

3. To further ensure public access, ASHRAE offers online read-only access to many of its standards—particularly those standards that have been incorporated into codes—on the ASHRAE website, available at <https://www.ashrae.org/technical-resources/standards-and-guidelines/read-only-versions-of-ashrae-standards>. This portion of the ASHRAE website allows viewers to read ASHRAE standards, including the 2004, 2007, and 2010 versions of Standard 90.1. ASHRAE feels it is important to provide this public service so that the public can have access to authentic versions of our standards in a format that allows readers to educate themselves on the standards but that does not harm ASHRAE’s business.



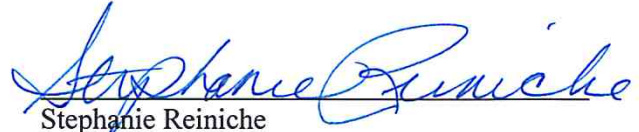
4. Each time new versions of ASHRAE standards are developed, ASHRAE offers those standards for sale. Sales of the standards are an important piece of ASHRAE's yearly revenues. ASHRAE also relies on membership fees as a significant source of its revenues, and a primary driver of memberships is that members gain access to ASHRAE standards at a discount. These sources of revenue permit ASHRAE to keep operating and developing new standards. As stated above, ASHRAE also makes new versions of many of its standards available for read-only access on its website. ASHRAE does not believe it is harmed by operating the reading room or that the reading room significantly compromises ASHRAE's ability to generate revenue. Instead, the reading room allows for ASHRAE to maintain control over its standards and insure use in ways that benefit ASHRAE. For instance, a user that samples the standard on the ASHRAE site may decide they prefer a mobile version of the standard to take to a construction job site; since the free version is read-only, that user would then buy a copy of the standard. For users that are content viewing the standard on the website, it still provides ASHRAE an opportunity to expose that individual to other products offered by ASHRAE, including by promoting trainings, conferences, and certifications offered on the ASHRAE website.

5. Unlike ASHRAE's read-only versions of the standards, ASHRAE believes that versions provided for free (in a downloadable or printable format) by others are harmful to ASHRAE's business. When a third-party, like Public.Resource.Org, purports to offer the exact same standard for free online, ASHRAE believes that provides ASHRAE's target market, which includes builders, contractors, and architects, with free access to products they would otherwise purchase from ASHRAE. These potential customers can now use printed versions of the ASHRAE standards without paying ASHRAE and without interacting with the ASHRAE website.

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



Executed this 4<sup>th</sup> day of October 2019 at 12:35 pm.

  
Stephanie Reiniche

USCA Case #22-7063 Document #1982413 Filed: 01/20/2023 Page 293 of 395

**MATERIAL UNDER SEAL DELETED**

**JA06948-JA07138**

**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/Counter-defendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant/Counterclaimant.

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

**PUBLIC RESOURCE’S SECOND MOTION FOR SUMMARY JUDGMENT**

Defendant-Counterclaimant Public.Resource.Org, Inc. (“Public Resource”) respectfully moves for summary judgment against Plaintiffs 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 because Public Resource’s reproduction, display, and distribution of the works listed in Appendix A to Plaintiffs’ motion (Dkt. 198-2) does not constitute copyright infringement and because the Plaintiffs have not met their burden for obtaining a permanent injunction under the Supreme Court’s standard in *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006).

As Public Resource describes in the accompanying memorandum of law in support of its motion for summary judgment and opposition to Plaintiffs’ motion for summary judgment and

permanent injunction, there are no genuine issues of material fact that would preclude summary judgment in favor of Public Resource. Public Resource's use of the incorporated standards is a non-infringing fair use. Moreover, Plaintiffs have not articulated any facts to meet all requirements for a permanent injunction under *eBay* and thus conclusively fail to show any right to the relief they seek in the case.

Public Resource further asserts that the Plaintiffs cannot assert copyright in the laws by incorporation at issue because the complete works they claim are binding laws of the United States and at least one state; because they are not copyrightable subject matter, excluded by 17 U.S.C. § 102(b); because the merger doctrine precludes enforcement of copyright in the works that the Plaintiffs assert, which have become government edicts and political facts as laws by incorporation; and because enforcement of the copyrights through the prior restraint that the Plaintiffs seek in this case would violate the First, Fifth, and Fourteenth Amendments of the United States Constitution. Because the United States Court of Appeals for the District of Columbia Circuit reserved a ruling on these issues in the recent appeal and remanded the case to this Court for re-evaluation of the fair use doctrine, and because Public Resource wishes to preserve these issues for a further appeal if necessary, Public Resource formally reasserts its earlier arguments on these points and incorporates here by reference the filings in support of its first motion for summary judgment at Docket Nos. 120-126, 146-147, 149, 151, 160-161, and 163-168.

Public Resource requests an oral hearing on its motion and its opposition to Plaintiffs' second motion for summary judgment and motion for a permanent injunction.

This motion relies on the attached memorandum of points and authorities; the declarations of Carl Malamud and Matthew Becker; Public Resource's request for judicial notice; the index of consolidated exhibits and the exhibits accompanying this motion; Public Resource's proposed



order, the pleadings and papers on file, specifically including Public Resource's filings on its earlier summary judgment motion; and any further material and argument that the parties may present to the Court at the hearing.

Dated: November 12, 2019

Respectfully submitted,

/s/ Andrew P. Bridges

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**MATERIAL UNDER SEAL DELETED**

**JA07142-JA07198**

**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/Counter-defendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant/Counterclaimant.

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

**DECLARATION OF CARL MALAMUD IN OPPOSITION TO [198] PLAINTIFFS'  
MOTION FOR SUMMARY JUDGMENT AND IN SUPPORT OF DEFENDANT  
PUBLIC.RESOURCE.ORG., INC.'S CROSS MOTION FOR SUMMARY JUDGMENT**

1. Since 2007, I have been the President and Founder of Public.Resource.Org (“Public Resource”), a nonprofit corporation incorporated in California which operates solely for educational and charitable purposes and is registered under Section 501(c)(3) of the Internal Revenue Code. I have personal knowledge of the matters stated in this declaration and could competently testify to them if called as a witness.

2. In this declaration, I address: (I) Some background on my previous work; and (II) my motivation and practices concerning the issues currently before the Court.

**I. CONTRIBUTIONS TO GOVERNMENT AND TO THE PUBLIC, AND EFFORTS TO MAKE GOVERNMENT AND LEGAL INFORMATION FREELY AVAILABLE**

3. I completed my doctoral coursework in Economics at the Indiana University School of Business, with a focus on antitrust and regulation. I dropped out of that program to work for the Indiana University computing center, where I worked on early relational database programs and computer networking, managed a large computer literacy program for business students, and assisted the computing center in connecting our university to the Internet.

4. In 1984, I was part of a small team at the Board of Governors of the Federal Reserve System that substantially changed how the Board used computers. We created a distributed architecture for the Research Division, installed Unix workstations and a computer network, and provided economists tools that led to substantial improvements in key indicators such as forecasts of the money supply.

5. I spent the rest of the 1980s as a computer consultant to the Argonne and Lawrence Livermore National Laboratories and the Department of Defense, as well as teaching advanced seminars in relational databases and computer networks. During that time, I shifted my focus to writing, authoring six books including a three-volume professional series on computer networks and one of the earliest books on relational databases. I also wrote extensively for the press as a featured columnist for publications such as Data Communications, Communications Week, and the Bangkok Post.

6. In the 1990s, I began to shift my focus exclusively to the global Internet, and in 1993 I founded the first radio station on the Internet, which I ran as a 501(c)(3) nonprofit public station. My weekly radio program “Geek of the Week” is considered the first “podcast.” We live-streamed all the luncheon addresses from the National Press Club, and I helped put the club on-line. **Exhibit 1** is a copy I obtained of an article about my work in this matter: John Markoff,

“Turning the Desktop PC Into a Talk Radio Medium,” New York Times, March 4, 1993.

7. In January 1994, I began efforts to make government materials, and especially legal materials, more widely available on the Internet. I used a National Science Foundation grant to purchase all electronic filings submitted by corporations to the Securities and Exchange Commission and made the Electronic Data Gathering and Retrieval (known as “EDGAR”) service available for free on the Internet. **Exhibit 2** is a copy of an article about my work in this matter: John Markoff, “Plan Opens More Data To Public,” New York Times, October 22, 1993.

8. In August 1995, I donated computers and software to the Securities and Exchange Commission so that it was were able to take over the EDGAR service. It ran the service on the Internet for several years using software we developed. **Exhibit 3** is a letter from the Securities and Exchange Commission to me on August 31, 1995 , stating in part: “Looking forward to your support as we continue down the road you’ve paved.” The SEC is still running this popular service today (now using their own software), making SEC filings available to the public at no cost, here: <https://www.sec.gov/edgar.shtml>.

9. In 1994, I obtained the first “new media” credentials from the Radio-TV Gallery of the U.S. House of Representatives and started live-streaming all proceedings from the floors of the House and Senate. **Exhibit 4** is a copy of an article written about my work in this matter: John Schwartz, “Superhighway Routed Through Capitol Hill,” Washington Post, September 9, 1994.

10. In 1995, I assisted the Joint Economic Committee in doing the first congressional hearing on the Internet, including live-streaming of the proceedings and questions received for the witnesses from viewers on the Internet. **Exhibit 5** is a letter from Senator Connie Mack to me on June 16, 1995, concerning the hearing.

11. In 1996, I led a team of colleagues from around the world to create the first World's Fair on the Internet. The fair attracted 5 million unique visitors, and included real-world events throughout the globe in locations such as Japan, Taiwan, the Netherlands, India, and Kazakhstan. The fair received letters of support from numerous heads of state including Presidents William J. Clinton and Boris Yeltsin; and my book on the world's fair, published by MIT Press, included a foreword from His Holiness the Dalai Lama. **Exhibit 6** is a copy of an article about my work in this matter: Katie Hafner, "The Man With Ideas: The Robert Moses of Cyberspace Plans a 1996 World's Fair," Newsweek, July 24, 1995. **Exhibit 7** is a copy of the foreword from my book: "Foreword by His Holiness the Dalai Lama," A World's Fair for the Information Age, MIT Press (1997).

12. In 1994, I purchased feeds of all U.S. patents and made them available for free on the Internet. I sought to convince the U.S. Patent and Trademark Office to provide this service instead of me, and in 1998 I engaged in a successful campaign to have the government make this information directly available to the public without charge. **Exhibit 8** is a copy of an article about my work in this matter: John Schwartz, "Ideas Whose Time for Free Access Has Come," Washington Post, June 29, 1998. **Exhibit 9** is a copy of another article about my work in this matter: John Markoff, "U.S. to Release Patent Data On a World Wide Web Site," New York Times, June 25, 1998.

13. In 2005 and 2006, I was the Chief Technology Officer for the non-profit education organization Center for American Progress. While there, I spent considerable time developing a plan that would make all congressional hearings available to the public in high-resolution video. The plan generated considerable interest throughout government. After I left the Center, I continued to pursue this idea. **Exhibit 10** is a letter to me from the Public Printer of

the United States on July 27, 2006 supporting my proposal. **Exhibit 11** is a letter to me from Hon. Nancy Pelosi, the Speaker of the House of Representatives, on April 17, 2008, supporting my “FedFlix” initiative, in which she stated: “I thank you for your work to increase public discourse on technology, public domain, and transparency issues and look forward to continuing to work with you.”

14. In 2007, I created Public.Resource.Org. One of the first intensive projects Public Resource undertook was to make congressional hearings more broadly available. After C-SPAN asserted copyright over the broadcast feed of the Speaker testifying before the House, I intervened and the result was broader availability of congressional hearings. As part of that effort, I purchased hundreds of DVDs of congressional hearings, with C-SPAN’s blessing, and posted them for free access on the net. **Exhibit 12** is a copy of an article about my work in this matter: James Fallows, “Another Win for Carl Malamud,” Atlantic Monthly, March 9, 2007.

15. In 2011, in one of his first acts upon taking office, Speaker John Boehner, together with Representative Darrell Issa, chair of the House Committee on Oversight and Government Reform, asked me to assist the U.S. House of Representatives in making congressional video more broadly available. As part of that effort, I helped make the Committee on Oversight and Government Reform the first committee to provide closed-captioning of video, and over the course of the project I posted over 14,000 hours of congressional video spanning a decade, and assisted committees in posting some of these videos on their own web sites. That effort was later recognized on the floor of the House. **Exhibit 13** is a letter from Speaker Boehner and Chairman Issa to me, on January 5, 2011, stating in part: “We’re writing today to thank you for your nearly two decades of work to increase the availability of public data, and more recently your efforts to publish proceedings of the House Oversight and Government

Reform Committee in their entirety.” **Exhibit 14** is a correct copy of the Remarks of Congressman Issa titled “Commemorating the Tenth Anniversary of Public.Resource.Org,” Congressional Record, Page E285, March 7, 2017.

16. From 2007 to 2015, Public Resource purchased and processed over 2,000 DVDs from the Internal Revenue Service containing the tax returns of non-profit organizations. In the course of that work, I found and redacted over 450,000 social security numbers and other privacy violations and submitted numerous reports to the IRS until it made substantial changes in its regulations to provide for the redaction of personal information. I also pressed the IRS to release e-file versions of non-profit tax returns and pursued a successful Freedom of Information suit in the U.S. District Court which resulted in the release of over 1.5 million e-file returns and substantial changes in IRS policy. *Public.Resource.org v. U.S. Internal Revenue Serv.*, 78 F. Supp. 3d 1262 (N.D. Cal. 2015). The data I processed forms the basis for the non-profit journalism organization ProPublica’s free search service for non-profit returns. **Exhibit 15** is a copy of an article about my work in this matter: Suzanne Perry, “IRS Plans to Begin Releasing Electronic Nonprofit Tax Forms Next Year,” *Chronicle of Philanthropy*, June 30, 2015.

17. In 2007, Public Resource made available for the first time historical opinions of all circuits of the U.S. Court of Appeals for free access on the Internet.

18. In the process of posting the Court of Appeals opinions, I found numerous Social Security Numbers in the opinions, some of which were visible on court web sites. I informed the Clerks of all the Circuits of this so that they were able to redact this information. **Exhibit 16** is a copy of an article about my work in this matter: Robert Ambrogi, “1.8M Pages of Federal Case Law To Go Public,” *Law Sites*, November 14, 2007. **Exhibit 17** is a copy of a letter to me from the Hon. Lee H. Rosenthal, Chair of the Committee on Rules of Practice and Procedure of the



Judicial Conference of the United States, on July 16, 2008, thanking me for the information I provided and stating “[i]t is enormously helpful to have the benefit of the empirical research that you have done.”

19. In 2008, I discovered thousands of documents with privacy violations in the PACER database of federal court filings after a colleague downloaded documents from a public access site of the Administrative Office of the U.S. Courts. I informed chief judges of 32 U.S. district courts about these issues, and many of them responded by ensuring that the documents were properly redacted. I also briefed congressional officials and, at the request of that court’s Chief Judge, the U.S. Court of Appeals for the Ninth Circuit. **Exhibit 18** is a copy of a letter to me from Chief Judge Royce C. Lamberth, U.S. District Court for the District of Columbia, on January 28, 2009, thanking me for my work and stating that the documents I had identified with social security numbers would be replaced with partially redacted versions. **Exhibit 19** is a copy of a letter from U.S. Senator Joseph I. Lieberman to Hon. Lee H. Rosenthal, on February 27, 2009, addressing my work and the need to better ensure redactions of sensitive personal data. **Exhibit 20** is a copy of my prepared statement before the U.S. Court of Appeals for the Ninth Circuit on June 23, 2010.

20. In April 2009, I signed Agreement No. NTIS-1832 with the National Technical Information Service, a part of the Department of Commerce, to start the FedFlix project I created to post decades of films and videos produced by the federal government. As part of that effort, NTIS sent me several hundred videos in various old formats. I digitized those videos and returned them to NTIS along with a disk drive of the digitized videos. I then posted the videos on YouTube and the Internet Archive.

21. In 2010, I met with the Honorable David Ferriero, Archivist of the United States,

and he agreed to let me send volunteers into the National Archives along with DVD duplicators. The volunteers, whom we called the “International Amateur Scanning League,” reproduced over 5,000 videos. Those were added to the YouTube and Internet Archive sites. The YouTube FedFlix channel has over 186,000 subscribers and has had over 74 million views. It can be accessed at <https://www.youtube.com/user/PublicResourceOrg>. The Internet Archive FedFlix collection has had close to 18 million views and can be accessed at <https://archive.org/details/FedFlix>.

22. In January 2009, President Obama’s transition effort asked me to develop plans for transforming the Federal Register. Those plans were adopted, and this resulted in making source code for the Federal Register available to the public at no charge. This code was then used by a number of open source programmers in California to create a vastly better version of the Federal Register, and this new version was subsequently adopted by the Office of the Federal Register as its official web site. I assisted the Office of the Federal Register and the White House throughout this process. I nominated the Office of the Federal Register for the first-ever Walter Gellhorn Award for innovation in government services by the Administrative Conference of the United States, of which I was a member, and was delighted that they won. The Archivist of the United States subsequently recognized my efforts. **Exhibit 21** is a copy of my submission to the Presidential Transition Effort (“Change.Gov”), titled “Federal Register 2.0,” on January 5, 2009. **Exhibit 22** is a copy of a letter from the Hon. David Ferriero, Archivist of the United States to me, on April 2, 2019, describing Public Resource’s “long-term commitment to public access,” mentioning receipt of the Walter Gellhorn Award, and stating in closing: “Our Founding Fathers believed that an informed and involved citizenry was key to our democracy and Public Resource helps us make[] this true.”

23. A number of organizations have recognized my efforts to make government information more accessible. In 2008, Harvard University presented me the Berkman Award for “outstanding contributions to the Internet’s impact on society.” In 2008 and 2016, the Society of Professional Journalists presented me the James Madison Award for Freedom of Information. In 2009, the First Amendment Coalition presented me the Bill Farr Award for furthering the principles of free speech, free press, and public access to government. In 2009, the Electronic Frontier Foundation, an organization with a mission to protect and promote privacy, civil liberties, and free expression (and one of the lead *pro bono* counsel for Public.Resource.Org in this case), presented me the Pioneer Award. In 2019, the American Association of Law Libraries presented me the Public Access to Government Information award.

## **II. PUBLIC RESOURCE’S EFFORTS TO MAKE THE LAW FREELY AVAILABLE**

24. My efforts to make the law available began with the judicial branch, but I was also keenly interested in state statutes. After the State of Oregon objected to Public Resource’s posting of the Oregon Revised Statutes, I was invited to appear before the Legislative Counsel Committee, a joint committee of the Oregon Legislature chaired by the Speaker of the House and the Senate President. After hearing from a number of witnesses, including the Legislative Counsel, the committee voted to waive all assertions of copyright over the Oregon Revised Statutes. **Exhibit 23** is a copy of my prepared statement before the Oregon State Legislature Legislative Counsel Committee on June 19, 2008.

25. In 2012, a similar situation occurred regarding the posting of the official Code of the District of Columbia. After the General Counsel of the District of Columbia studied the situation, he actively encouraged a number of my colleagues in the open source community to work with the code, and the results were a spectacularly better web site for public access to the laws of the District of Columbia. The software is maintained by the non-profit Open Law Library

and can be seen at <https://code.dccouncil.us/>.

26. Not all states have been as welcoming to such efforts. The States of Georgia and Mississippi both objected strenuously to efforts to make their state laws more broadly accessible, and the State of Georgia sued Public.Resource.Org. That case is now before the U.S. Supreme Court, and it has attracted widespread attention from a number of amici and commentators. *State of Georgia et. al. v. Public.Resource.Org*, U.S. Supreme Court Docket 18-1150. **Exhibit 24** is a copy of an article about my work in this matter: The Editorial Board, “The Law©?,” New York Times, June 25, 2019.

27. Because of my long-standing interest in administrative law and my interaction with groups such as the Office of the Federal Register, I was naturally drawn to the regulations of my home state, California. I spent considerable effort converting the California Code of Regulations into HTML (hypertext markup language), including conversion of all the diagrams to the open “SVG” (scalable vector graphics) standard, which allows high-quality diagrams to be resized and coded the formulas to the open “MathML” standard, which makes the mathematical expressions accessible to the visually impaired.

28. Although most portions of the California Code of Regulations are freely available online, a notable gap in the California Code of Regulations is Title 24, which are the public safety codes of California, including the building, fire, electrical, plumbing, mechanical, and other state-wide public safety codes. The codes are developed and released on a triennial cycle which includes numerous public hearings coordinated by the Building Standards Commission with the strong participation of 13 additional state agencies. The process results in a triennial release of heavily amended versions of model codes, versions that are issued under the authority of the State of California and must be enforced by all municipalities and counties in the state.

29. After deep study of the mechanics of this process of adoption, and reading legal decisions relevant to the question, such as the *Veck* decision of the Fifth Circuit, I began purchasing and posting Title 24 of the California Code of Regulations in 2008. I then carefully examined other state statutes and regulations looking for explicit and deliberate incorporation by reference of other codes that had binding effect in state laws and regulations.

30. In 2010, I wrote to Ms. Maureen Brodoff, General Counsel of NFPA, and asked for a meeting with Mr. James Shannon, then the President of the organization. In June 2011, I met with Ms. Brodoff and Mr. Shannon. They requested that the meeting be governed by a Non-Disclosure Agreement so I am not able to discuss the details, but I can say the meeting was cordial and informative. In 2012, NFPA asked if I could come to Boston to discuss issues with its technical staff and offered to pay for my plane ticket.

31. Based on my frequent interactions with the Government Printing Office and the Office of the Federal Register and my membership in the Administrative Conference of the United States, I was quite familiar with the Code of Federal Regulations and the process of incorporation by reference. In 2012, I made a careful study of the Code of Federal Regulations and purchased a number of standards that it had incorporated. I made copies of those standards, added additional materials including a number of letters addressed to government officials, and sent these packets to 10 standards bodies and a number of government agencies. In those packets, I set out my thoughts as to why these materials were binding law and should be made available to the general public. I asked for comments from the standards bodies, but not one responded. **Exhibit 25** is a correct copy of a document I sent in these mailings, with the title “Notice of Incorporation,” dated March 15, 2012.

32. After waiting 45 days for comments (and sending notes to organizations such as

NFPA to make sure they had received the packets), I began posting standards that the federal government had incorporated by reference into the Code of Federal Regulations. I heard nothing from standards bodies, with the exception of two take-down notices, one in November 2012 from the American Petroleum Institute and one in December 2012 from the National Standard Plumbing Code Committee. In each case I responded with a letter stating why I believed these documents were properly incorporated into law, and in both cases I did not hear back from the organizations.

33. In January 2013, I was contacted by the Sheet Metal and Air Conditioning Contractors National Association (SMACNA) concerning the posting of the “HVAC Air Duct Leakage Test Manual” which was incorporated by reference into 10 CFR § 434.403 as well into state regulations. I responded to SMACNA stating my reasons for posting the document in question. **Exhibit 26** is a copy of my response to SMACNA, on January 11, 2013.

34. After SMACNA continued to object and threatened suit, Public Resource sued for declaratory relief in the U.S. District Court for the Northern District of California, *Public.Resource.Org v. Sheet Metal and Air Conditioning Contractors’ National Association, Inc.*, Case No. 3:13-cv-00815. On July 9, 2013 SMACNA agreed to a stipulated judgment in which it agreed no longer to threaten Public Resource or other parties for the posting of 4 standards explicitly incorporated into the CFR, not to assert copyright in those documents, and to pay Public Resource a token one dollar. **Exhibit 27** is a correct copy of the Stipulation and Judgment resolving that lawsuit.

35. Throughout the six years this lawsuit has been ongoing, I have been driven by one key fact, one that is uncontested: standards incorporated by reference into the U.S. Code of Federal Regulations have the force of law. As S. Joe Bhatia, the President of the American

National Standards Institute, has said, “A standard that has been incorporated by reference does have the force of law, and it should be available.” He stated this when ANSI and other standards bodies, including the plaintiffs in the present action, announced they were making standards available for the first time for public viewing in a carefully controlled “reading room.” This action was a direct response to my posting of standards in 2012 and occurred in conjunction with the filing of this lawsuit. **Exhibit 28** is a copy I of an article from the ANSI website, titled “ANSI Launches Online Portal for Standards Incorporated by Reference,” dated October 28, 2013.

36. I applaud the action of ANSI and the plaintiffs in the current action in finally taking a step to make their documents available, if only for limited reading. This is a step forward and is certainly different from their posture before my initiative in 2012. But it is not enough in terms of promulgating the law widely. I believe the issue is whether citizens have the right to speak the law in a way that allows others to better understand their rights and obligations. I am inspired by the example of John B. West, who created the National Reporter System, an action that would not have been possible if state and federal courts had asserted copyright over the opinions of the judges. I presented this view before the House of Delegates of the American Bar Association. **Exhibit 29** is a copy of my prepared remarks before the ABA House of Delegates on August 9, 2016. **Exhibit 30** is a copy of an article about my work in this matter: Lorelei Laird, “After debate, ABA House calls for publication of privately drafted standards used in legislation,” ABA Journal, August 9, 2016.

37. I have also been inspired by the story of the Hot Oil case, where a case reached the U.S. Supreme Court in which nobody knew what the law really was. *Panama Refining Co. v. Ryan*, 293 U.S. 388 (1935). This led Justice Brandeis to reach out to Felix Frankfurter, who

drafted a young professor named Erwin Griswold to write a seminal article in the Harvard Law Review resulting in the passage of the Administrative Procedures Act and the creation of the Federal Register. This story was told on the 70th Anniversary of the Federal Register and then again on the 75th Anniversary when the Office of the Federal Register formally released an official “Federal Register 2.0,” which I helped create. **Exhibit 31** is a correct copy of an article about that event: Hon. David Ferriero, “Federal Register 2.0,” The White House Blog, July 26, 2010. **Exhibit 32** is a copy of a document commemorating this event: History of the Federal Register, March 14, 2006.

38. My focus has been *the law*. I realize that, in this lawsuit, the works at issue are the standards published by the plaintiffs. But for me the *work at issue* has always been the Code of Federal Regulations and state codes such as Title 24 of the California Code of Regulations. My goal has always been to create an unabridged version of the law, one that is able to better inform my fellow citizens about their rights and obligations. Because of the lawsuit, Public Resource’s work on making the unabridged CFR available has been greatly hampered, but we are continuing our efforts to improve access to the CFR. For example, Public Resource has been assisting the Cornell Legal Information Institute by redrawing the diagrams in the CFR into SVG, coding the mathematics, and taking the forms and tables that are often included as bitmap images into valid HTML code. The Cornell version of the CFR is far more accessible than the government versions, and I believe that the Cornell version is also used far more often by citizens. **Exhibit 33** is a copy of an article about my work with the Cornell Legal Information Institute: Cornell Legal Information Institute, “Worth A Thousand Words: We’re Upping Our Game for Images,” April 4, 2019.

39. In twelve years of studying standards incorporated by reference, I am struck by



the fact that I have never once come across an instance of a standards body objecting to a standard being incorporated by reference into law (except where it objects to having an older edition incorporated into law, preferring a newer edition). Indeed, in the vast majority of the instances, incorporation into law is an explicit goal of the standards organizations. I realize that a great deal of material is incorporated by reference; indeed, in many instances I believe that regulators and standards bodies are too quick to make the law more voluminous than it should be. But it is not my place to second-guess the regulators.

40. I have exercised great care in trying to only post materials that have been made into law, including having numerous conversations with the Office of the Federal Register to understand exactly what has been incorporated. For example, **Exhibit 34** is a copy of an email exchange on March 1, 2016, that I had with Amy Bunk, Director of Legal Affairs and Policy at the Office of the Federal Register, in which she stated: “Our regulations require that agencies specifically identify the materials they wish to incorporate by reference, whether it is an entire publication or sections of a publication. If an agency hasn't identified a specific section of a publication, they have incorporated the entire publication.” The fact that a standards body coordinated a document, often with the participation and encouragement of numerous government agencies among the actual authors, strikes me no different than the fact that numerous lobbyists on K Street assist the Congress and regulators by coordinating (and often writing) draft legislative texts that become laws and regulations. The true authors of the law, once it is promulgated, are the people of the United States, and thus no claim of copyright can prevent or constrain citizens from speaking their own laws.

41. I do not believe I am unique in my passion for making the law available. In a democracy, promulgation is a key aspect of the rule of law. It is the key to our democratic system

of government. I am inspired and often quote the words of John Adams in his seminal “A Dissertation on the Canon and Feudal Law.” He said: “liberty cannot be preserved without a general knowledge among the people, who have a right, from the frame of their nature, to knowledge ... they have a right ... to that most dreaded and envied kind of knowledge, I mean, of the characters and conduct of their rulers. Rulers are no more than attorneys, agents, and trustees for the people. ... let the public disputations become researches into the grounds and nature and ends of government, and the means of preserving the good and demolishing the evil. ... In a word, let every sluice of knowledge be opened and set a-flowing.” **Exhibit 35** is a copy of John Adams’ “Dissertation on the Canon and Feudal Law.”

42. I am aware that in its opinion for *Bellwether Properties, LLC, v. Duke Energy Indiana, Inc.*, 87 N.E.3d 462, 468–69 (Ind. 2017), the Indiana Supreme Court stated that the only way it was able to access a version of the 2002 version of the National Electrical Safety Code (NESC), which the Institute of Electrical and Electronic Engineers (IEEE) had promulgated, was by finding it online on the Internet Archive, at <https://ia600704.us.archive.org/16/items/gov.law.ieee.c2.2002/ieee.c2.2002.pdf>. I am the person who posted that 2002 version of the NESC to that location on the Internet Archive, in the course of my efforts to make the law freely available. The metadata page for this document indicates that it was “Uploaded by Public.Resource.Org,” *see* <https://archive.org/details/gov.law.ieee.c2.2002> and [https://ia600704.us.archive.org/16/items/gov.law.ieee.c2.2002/ieee.c2.2002.pdf\\_meta.txt](https://ia600704.us.archive.org/16/items/gov.law.ieee.c2.2002/ieee.c2.2002.pdf_meta.txt).

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 November, 2019 at New Delhi, India.

A handwritten signature in black ink, appearing to read "Carl Malamud", written in a cursive style.

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Carl Malamud

**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/Counter-defendants,

v.

PUBLIC.RESOURCE.ORG, INC.,

Defendant/Counterclaimant.

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

**SUPPLEMENTAL DECLARATION OF MATTHEW BECKER IN OPPOSITION TO  
[198] PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT AND PERMANENT  
INJUNCTION AND IN SUPPORT OF DEFENDANT PUBLIC RESOURCE'S  
SECOND MOTION FOR SUMMARY JUDGMENT**

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 Public.Resource.Org, Inc. ("Public Resource"). Except where otherwise indicated, I have personal knowledge of the facts herein and could and would testify competently hereto.

**I. NEWLY OBTAINED OR NOW UNABRIDGED DEPOSITION TESTIMONY**

2. The first two deposition transcripts provide newly obtained testimony from current and former government officials that is pertinent to several aspects of the incorporation process,

use of the standards as laws, and public access to those laws, among other issues. After those, I attach here complete copies of deposition transcripts that had previously been provided to the Court only in part. These complete copies are attached both for the convenience of having them collected in one place, and also in case unabridged copies might aid the Court in its analysis.

3. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 36** is a true and correct transcript of the deposition of Mia D. Marvelli, dated August 19, 2019.

4. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 37** is a true and correct transcript of the deposition of Mary H. Saunders, dated August 15, 2019.

5. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 38** is a true and correct transcript of the deposition of Plaintiffs' expert, John Jarosz, dated August 27, 2015. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 9.

6. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 39** is a true and correct transcript of the deposition of Public Resource's expert, James Fruchterman, dated July 31, 2015. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 7.

7. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 40** is a true and correct transcript of the deposition of Daniel Smith, one of ASTM's Rule 30(b)(6) designees, dated July 24, 2015. Portions of this transcript were previously provided at Dkt. 122-2, Ex. 13.

8. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 41** is a true and correct transcript of the deposition of Christian Dubay, one of NFPA's Rule 30(b)(6) designees, dated April 1, 2015. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 6.

9. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 42** is a true and correct transcript of the deposition of Bruce Mullen, one of NFPA's Rule 30(b)(6) designees, dated March 31, 2015. Portions of this transcript were previously provided at Dkt. 122-2, Ex. 11.

10. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 43** is a true and correct transcript of the deposition of Stephanie Reiniche, one of ASHRAE's Rule 30(b)(6) designees, dated March 30, 2015. Portions of this transcript were previously provided at Dkt. 122-2, Ex. 12.

11. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 44** is a true and correct transcript of the deposition of Steven Comstock, one of ASHRAE's Rule 30(b)(6) designees, dated March 5, 2015. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 5.

12. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 45** is a true and correct transcript of the deposition of Jeffrey Grove, one of ASTM's Rule 30(b)(6) designees, dated March 4, 2015. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 8.

13. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 46** is a true and correct transcript of the deposition of Donald Bliss, one of NFPA's Rule 30(b)(6) designees, dated March 3, 2015. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 4.

14. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 47** is a true and correct transcript of the deposition of Carl Malamud, dated February 27, 2015. Portions of this transcript were previously provided at Dkt. 122-12, Ex. 3.

15. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 48** is a true and correct transcript of the deposition of Carl Malamud as Rule 30(b)(6) designee for Public Resource, dated February 26, 2015. Portions of this transcript were previously provided at Dkt. 118-12, Ex. 2.

16. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 49** is a true and correct transcript of the deposition of Vikas Bhutada, Rule 30(b)(6) designee for third party HTC Global Services, dated November 5, 2014. Portions of this transcript were previously provided at Dkt. 122-12, Ex. 5.

17. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 50** is a true and correct transcript of the deposition of Rebecca Malamud, Rule 30(b)(6) designee for third party Point B Studio, dated November 13, 2014. Portions of this transcript were previously provided at Dkt. 122-1, Ex. 10.

18. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 51** is a true and correct copy of ASHRAE's Answers and Objections to Public Resource's Third Set of Interrogatories, dated June 26, 2019.

19. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 52** is a true and correct copy of NFPA's Answers and Objections to Public Resource's Third Set of Interrogatories, dated July 1, 2019.

20. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 53** is a true and correct copy of ASTM's Second Supplemental Objections and Responses to Public Resource's Third Set of Interrogatories, dated September 9, 2019.

21. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 54** is a true and correct copy of ASTM's Objections and Responses to Public Resource's First Set of Interrogatories, dated March 24, 2014.

22. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 55** is a true and correct copy of ASHRAE's 2016-17 Financial Update and Budget Board of Directors Presentation, produced as begin Bates reference ASHRAE0045821.

23. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 56** is a true and correct copy of ASHRAE's 2017-18 Financial Update and Budget Board of Directors Presentation, produced as begin Bates reference ASHRAE0045848.

24. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 57** is a true and correct copy of Exhibit 5 from the deposition of Mary Saunders.

25. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 58** is a true and correct copy of Exhibit 9 from the deposition of Mary Saunders. This exhibit is the Office of the Federal Register's "IBR Handbook," dated July 2018, available at <https://www.archives.gov/federal-register/write/handbook>.

26. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 59** is a true and correct copy of Exhibit 10 from the deposition of Mary Saunders.

27. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 60** is a true and correct copy of Exhibit 11 from the deposition of Mary Saunders.

28. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 61** is a true and correct copy of Exhibit 13 from the deposition of Mary Saunders.

29. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 62** is a true and correct copy of Exhibit 14 from the deposition of Mary Saunders.



30. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 63** is a true and correct copy of Exhibit 21 from the deposition of Mary Saunders.

31. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 64** is a true and correct copy of Exhibit 23 from the deposition of Mary Saunders.

32. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 65** is a true and correct copy of Exhibit 24 from the deposition of Mary Saunders.

33. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 66** is a true and correct copy of Exhibit 25 from the deposition of Mary Saunders.

34. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 67** is a true and correct copy of Exhibit 26 from the deposition of Mary Saunders.

35. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 68** is a true and correct copy of Exhibit 28 from the deposition of Mary Saunders.

36. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 69** is a true and correct copy of Exhibit 37 from the deposition of Mary Saunders.

37. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 70** is a true and correct copy of Exhibit 43 from the deposition of Mary Saunders.

38. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 71** is a true and correct copy of Exhibit 46 from the deposition of Mary Saunders.

39. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 72** is a true and correct copy of the December 31, 2015 and 2014 National Fire Protection Association Financial Statements, produced as begin Bates reference NFPA-PR0097912.

40. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 73** is a true and correct copy of the December 31, 2016 and 2015 National Fire Protection Association Financial Statements, produced as begin Bates reference NFPA-PR0097936.

41. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 74** is a true and correct copy of December 31, 2017 and 2016 National Fire Protection Association Financial Statements, produced as begin Bates reference NFPA-PR0097961.

42. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 75** is a true and correct copy of the December 31, 2018 and 2017 National Fire Protection Association Financial Statements, produced as begin Bates reference NFPA-PR0097987.

43. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 76** is a true and correct copy of the NFPA income statement, produced as begin Bates reference NFPA-PR0098016.

44. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 77** is a true and correct copy of the Code and Standard Units Sold, produced as begin Bates reference NFPA-PR0098022.

45. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 78** is a true and correct copy of page view and sales information, produced as begin Bates reference NFPA-PR0098023.

46. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 79** is a true and correct copy of NFPA Publication sales 2009-2013, produced as begin Bates reference NFPA-PR0098028.

47. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 80** is a true and correct copy of NFPA Publication sales 2014-2018, produced as begin Bates reference NFPA-PR0098029.

48. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 81** is a true and correct copy of an email produced as begin Bates reference NFPA-PR0098030.

49. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 82** is a true and correct copy of the NEC adoption maps, produced as begin Bates reference NFPA-PR0098046.

50. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 83** is a true and correct copy of CodeFinder Tool Disclaimer, produced as begin Bates reference NFPA-PR0098059.

51. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 84** is a true and correct copy of Exhibit 3 from the deposition of Mia Marvelli.

52. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 85** is a true and correct copy of Exhibit 4 from the deposition of Mia Marvelli.

53. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 86** is a true and correct copy of Exhibit 7 from the deposition of Mia Marvelli.

54. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 87** is a true and correct copy of Exhibit 8 from the deposition of Mia Marvelli.

55. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 88** is a true and correct copy of Exhibit 9 from the deposition of Mia Marvelli.

56. Attached as **Exhibit 89** is a table of the ASHRAE standards at issue in this case, and text of applicable incorporations into law. Because incorporations into law are numerous and

occur at the federal, state, and local levels of government, this table does not exhaust every incorporation for the relevant standards.

57. Attached as **Exhibit 90** is a table of the ASTM standards at issue in this case, and text of applicable incorporations into law. Because incorporations into law are numerous and occur at the federal, state, and local levels of government, this table does not exhaust every incorporation for the relevant standards.

58. Attached as **Exhibit 91** is a table of the NFPA standards at issue in this case, and text of applicable incorporations into law. Because incorporations into law are numerous and occur at the federal, state, and local levels of government, this table does not exhaust every incorporation for the relevant standards.

59. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 92** is a true and correct copy of a printout from the National Archives website, titled "Incorporation by Reference", available at <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

60. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 93** is a true and correct copy of the Declaration in Support of Probable Cause, *California v. Harris*, No. 17-CR-017349A (Cal. Super. Ct. June 5, 2017), available at <https://www.scribd.com/document/350446988/Ghost-Ship-fire-criminal-charges>.

61. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 94** is a true and correct copy of the Criminal Complaint, *California v. Harris*, No. 17-CR-017349A (Cal. Super. Ct. June 5, 2017), available at <https://web.archive.org/web/20170729051241/https://cbssanfran.files.wordpress.com/2017/06/almena-and-harris-complaint.pdf>).

62. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 95** is a true and correct copy of the internal document produced by ASTM at ASTM102031-2.

63. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 96** is a true and correct copy of the Expert Report of James Fruchterman, previously submitted at Dkt. 122-6 and resubmitted for the convenience of the Court.

64. Attached to Public Resource's Consolidated Index of Exhibits as **Exhibit 97** is a true and correct copy of the internal document produced by ASTM at ASTM19297-9.

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

Executed this 12th day of November, 2019 at San Francisco, California.

/s/ Matthew B. Becker

Matthew B. Becker

Case 1:13-cv-01215-TSC Document 204-40 Filed 11/13/19 Page 1 of 2

# EXHIBIT 34

Hi Carl,

Our regulations require that agencies specifically identify the materials they wish to incorporate by reference, whether it is an entire publication or sections of a publication. If an agency hasn't identified a specific section of a publication, they have incorporated the entire publication. It's best to check each specific incorporation by reference to see what the agency has incorporated.

Amy

On Mon, Feb 29, 2016 at 3:29 PM, Carl Malamud <[carl@media.org](mailto:carl@media.org)> wrote:  
Hi Amy -

Hope you're well!

You, me, Michael White, and Ray Mosley all discussed at various times the idea that if a document is incorporated by reference in the CFR, the entire document is incorporated unless it specifically says only one section.

Is that written down anywhere? I've looked in the IBR manual on your site, looked at the FR notices for the IBR rules going back to 1967, and can't seem to find that actually stated.

The one exception is the Mineral Management Service (MMS), now the BSEE, which makes a point of stating "The entire document is incorporated by reference, unless the text of the corresponding sections in this part  
<https://www.law.cornell.edu/cfr/text/30/250.198>

Is there a more definitive source for "the entire document is incorporated" ?

Best regards,

Carl

--

Amy Bunk  
Director of Legal Affairs and Policy  
Office of the Federal Register  
National Archives and Records Administration  
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Case 1:13-cv-01215-TSC Document 204-42 Filed 11/13/19 Page 1 of 89

# **EXHIBIT 36**



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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 CASE NO.  
AMERICAN SOCIETY OF 1:13-cv-01215-TSC-DAR  
HEATING, REFRIGERATING,  
AND AIR CONDITIONING  
ENGINEERS,  
Plaintiffs-  
Counterdefendants,  
vs.  
PUBLIC.RESOURCE.ORG, INC.,  
Defendant-Counterclaimant.

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VIDEOTAPED DEPOSITION OF MIA D. MARVELLI  
Sacramento, California  
Monday, August 19, 2019  
Volume I

Reported by:  
Carrie Pederson  
CSR No. 4373, RMR, CRR  
Job No. 3465980  
Pages 1 - 202

1 UNITED STATES DISTRICT COURT  
2 FOR THE DISTRICT OF COLUMBIA  
3  
4 AMERICAN SOCIETY FOR  
TESTING AND MATERIALS  
5 d/b/a ASTM INTERNATIONAL,;  
6 NATIONAL FIRE PROTECTION  
ASSOCIATION, INC. and CASE NO.  
7 AMERICAN SOCIETY OF 1:13-cv-01215-TSC-DAR  
8 HEATING, REFRIGERATING,  
AND AIR CONDITIONING  
9 ENGINEERS,  
10 Plaintiffs-  
11 Counterdefendants,  
12 vs.  
13 PUBLIC.RESOURCE.ORG, INC.,  
14 Defendant-Counterclaimant.  
15  
16  
17  
18  
19 Videotaped Deposition of MIA D. MARVELLI,  
20 Volume I, taken on behalf of the defendants, at One  
21 Capitol Mall, Suite 240, Sacramento, California,  
22 beginning at 10:04 a.m. and ending at 4:22 p.m. on  
23 Monday, August 19, 2019, before Carrie Pederson,  
24 Certified Shorthand Reporter No. 4373.  
25

Page 2

1 APPEARANCES:  
2  
3 For Plaintiff National Fire Protection Association:  
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12 And  
13 MUNGER, TOLLES & OLSON LLP  
14 BY: ROSE LEDA EHLER  
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Page 3

1 APPEARANCES: (Continued)  
2  
3 For Plaintiff American Society of Testing and  
4 Materials d/b/a ASTM International:  
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14 FENWICK & WEST LLP  
15 BY: ARMEN NERCESSIAN  
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Page 4

1 APPEARANCES: (Continued):  
2  
3 For California Building Standards Commission and the  
4 Witness:  
5 STATE OF CALIFORNIA  
6 DEPARTMENT OF JUSTICE  
7 OFFICE OF THE ATTORNEY GENERAL  
8 BY: JERRY YEN  
9 Attorney at Law  
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14  
15 Also Present:  
16 Viana Barbu, Attorney at Law  
17 State of California  
18 Department of General Services  
19 Legal Division  
20  
21 Videographer: John Macdonell  
22  
23  
24  
25

Page 5

<p>1 INDEX                  2 WITNESS:                  3 MIA D. MARVELLI                  4 Volume I                  5                  6 PAGE                  7 Examination By Mr. Nercessian 8                  8 Examination By Ms. Miller-Ziegler 160                  9 Examination By Mr. Nercessian 186                  10 Examination By Ms. Miller-Ziegler 197                  11 Examination By Mr. Nercessian 199                  12                  13                  14                  15                  16                  17                  18                  19                  20                  21                  22                  23                  24                  25</p>	<p>1 Sacramento, California, Monday, August 19, 2019                  2 10:04 a.m. - 4:22 p.m.                  3                  4 MIA D. MARVELLI,                  5 having been administered an oath, was examined and                  6 testified as follows:                  7 EXAMINATION                  8 THE REPORTER: Good morning, counsel. Do                  9 you want realtime also?                  10 MS. EHLER: Yes.                  11 MR. FEE: No. 10:01                  12 VIDEO OPERATOR: Okay. We're on the 10:01                  13 record. It's 10:04 a.m. on August 19th, 2019. 10:04                  14 This is the deposition of Mia Marvelli. 10:04                  15 We're here in the matter of American Society 10:04                  16 for Testing and Materials, et al. versus 10:04                  17 Public.Resource.Org. 10:04                  18 We're located at One Capitol Mall in 10:04                  19 Sacramento, California. 10:04                  20 I'm John Macdonell, the videographer, with 10:04                  21 Veritext. I'm not related to any party in this 10:04                  22 action, nor am I a notary public or financially 10:04                  23 interested. 10:04                  24 Before the reporter swears the witness, 10:04                  25 would counsel please identify themselves. 10:04</p>
Page 6	Page 8
<p>1 EXHIBITS                  2 DEFENDANT'S                  3 DESCRIPTION PAGE                  4 Exhibit 1 July 19, 2019 letter to Mia 24                  5 Marvelli from Fenwick &amp; West LLP                  6 Exhibit 2 Marvelli Depo Prep 33                  7 Exhibit 3 Codes 34                  8 Exhibit 4 2019 California Electrical Code 57                  9 Exhibit 5 Subpoena to Testify at a 83                  10 Deposition in a Civil Action                  11 Exhibit 6 March 10, 2016 email to Michael 85                  12 Nearman from Pamela Maeda                  13 Exhibit 7 State of California Standard 107                  14 Agreement                  15 Exhibit 8 August 1, 2016 email to DGS 132                  16 CBSC-Sacramento Staff from Alexander Hunter                  17 Exhibit 9 NCB Coordination Sheet, 141                  18 Department of General Services                  19 Exhibit 10 California Electrical Code 150                  20 Agreement Between and Among BNi                  21 Publications, Inc., Department                  22 of General Services Procurement                  23 Division For California Building                  24 Standards Commission And The                  25 National Fire Protection                  Association, Inc.</p>	<p>1 MR. NERCESSIAN: Yes. I'm Armen Nercessian 10:04                  2 of Fenwick &amp; West representing Defendant 10:04                  3 Public.Resource.Org. 10:04                  4 MR. BRIDGES: Andrew Bridges of 10:04                  5 Fenwick &amp; West also representing Public.Resource.Org. 10:04                  6 MR. YEN: Jerry Yen with the California 10:05                  7 Attorney General's Office representing the witness 10:05                  8 and the California Building Standards Commission. 10:05                  9 MS. BARBU: Viana Barbu with the Department 10:05                  10 of General Services Legal Division representing Mia 10:05                  11 Marvelli as Executive Director of Building Standards 10:05                  12 Commission. 10:05                  13 MS. MILLER-ZIEGLER: Rachel Miller-Ziegler 10:05                  14 with Munger, Tolles &amp; Olson here on behalf of the 10:05                  15 National Fire Protection Association. 10:05                  16 MS. EHLER: And Rose Ehler, also from 10:05                  17 Munger, Tolles &amp; Olson, and on behalf of the National 10:05                  18 Fire Protection Association. 10:05                  19 MR. FEE: Kevin Fee from Morgan Lewis on 10:05                  20 behalf of ASTM. 10:05                  21 (Witness sworn) 10:05                  22 BY MR. NERCESSIAN: 10:05                  23 Q. Good morning. 10:05                  24 A. Good morning. 10:05                  25 Q. Please state your name for the record. 10:05</p>
Page 7	Page 9

<p>1 A. Mia Marvelli. 10:05                  2 Q. Good morning, Ms. Marvelli. Have you ever 10:05                  3 had your deposition taken before? 10:05                  4 A. No. 10:05                  5 Q. Have you ever been involved in any lawsuits 10:05                  6 before? 10:06                  7 A. Yes. 10:06                  8 Q. What was your involvement in previous 10:06                  9 lawsuits? 10:06                  10 A. Respondent. 10:06                  11 Q. In your capacity as a representative of the 10:06                  12 State? 10:06                  13 A. Yes. 10:06                  14 Q. Did you furnish any testimony in any of 10:06                  15 those matters? 10:06                  16 A. A declaration. 10:06                  17 Q. Did you furnish any live testimony? 10:06                  18 A. No. 10:06                  19 Q. So I'll lay out a few preliminaries of how 10:06                  20 today is going to go: I will ask you a series of 10:06                  21 questions. Do you understand that you are giving 10:06                  22 testimony under oath today? 10:06                  23 A. Yes. 10:06                  24 Q. Just as you would in a court of law? 10:06                  25 A. Yes. 10:06</p> <p style="text-align: right;">Page 10</p>	<p>1 take it to mean you were finished. Do you understand 10:07                  2 that? 10:07                  3 A. Yes. 10:07                  4 Q. If you come to realize that any of your 10:07                  5 answers that you previously provided is not 10:07                  6 completely correct, just let me know, and we'll 10:07                  7 address it; okay? 10:07                  8 A. Yes. 10:07                  9 Q. And if you need a break at any time over the 10:07                  10 course of the day, just let me know, and if there is 10:08                  11 a question pending, we can give you the break. Does 10:08                  12 that make sense? 10:08                  13 A. Yes. 10:08                  14 Q. Have you spoken with anyone about your 10:08                  15 testimony today? 10:08                  16 A. No. Just my representation. 10:08                  17 Q. Have you been asked to limit your testimony 10:08                  18 today in any way? 10:08                  19 A. No. 10:08                  20 Q. Is there any reason you would not be able to 10:08                  21 give complete and accurate answers to my questions 10:08                  22 today? 10:08                  23 A. No. 10:08                  24 Q. What did you do to prepare for today's 10:08                  25 deposition? 10:08</p> <p style="text-align: right;">Page 12</p>
<p>1 Q. Do you understand that the court reporter is 10:06                  2 taking down everything you say? 10:06                  3 A. Yes. 10:06                  4 Q. Because to establish a record, do you 10:06                  5 understand that we need only audible responses such 10:06                  6 as a verbal "yes" or "no"? 10:06                  7 A. Yes. 10:07                  8 Q. If at any point you don't understand a 10:07                  9 question, will you please let me know? And I will 10:07                  10 try to rephrase. 10:07                  11 A. Yes. 10:07                  12 Q. If you answer my question without asking for 10:07                  13 clarification, I'm going to take it to mean that you 10:07                  14 understood it. Is that understood? 10:07                  15 A. Yes. 10:07                  16 Q. Because the court reporter's taking down 10:07                  17 what everyone says, let's not try to talk -- let's 10:07                  18 try not to talk over one another. So if I'm asking a 10:07                  19 question, please wait for me to finish before you 10:07                  20 answer. Do you understand? 10:07                  21 A. Yes. 10:07                  22 Q. Likewise, if I start to ask you a question 10:07                  23 and you weren't allowed to finish, please tell me, 10:07                  24 and I'll allow you to finish. If I go on to another 10:07                  25 question and you don't say you need more time, I'll 10:07</p> <p style="text-align: right;">Page 11</p>	<p>1 A. Read the documents that were provided me. 10:08                  2 Q. Did you review any other documents? 10:08                  3 A. No. 10:08                  4 Q. Did you conduct any research on your own 10:08                  5 into the case? 10:08                  6 A. No. 10:08                  7 Q. Did you conduct any research on your own 10:08                  8 into the subject matter of the documents? 10:08                  9 A. No. 10:08                  10 Q. Did you have any conversations to prepare 10:08                  11 your testimony other than those with your 10:09                  12 representation? 10:09                  13 A. No. 10:09                  14 Q. Are you currently employed? 10:09                  15 A. Yes. 10:09                  16 Q. What's your current employment? 10:09                  17 A. Executive Director of the Building Standards 10:09                  18 Commission. 10:09                  19 Q. And what is the Building Standards 10:09                  20 Commission? 10:09                  21 A. It's a state commission that administers the 10:09                  22 California Building Standards process, and there's 14 10:09                  23 staff, and there's ten commissioners that we support. 10:09                  24 Q. Okay. And when you say you administer the 10:09                  25 process, what does that process entail? 10:09</p> <p style="text-align: right;">Page 13</p>

<p>1 A. We utilize the California Building Standards 10:09                  2 law, which is found in the Health and Safety Code, 10:09                  3 and we also use the Administrative Procedures Act, 10:09                  4 which is in the Government Code, to administer the 10:09                  5 rulemaking process for -- it's also known as 10:09                  6 Title 24. 10:10                  7 Q. Title 24. Does Title 24 go by any other 10:10                  8 names? 10:10                  9 A. California Building Standards Code. 10:10                  10 Q. And it's Title 24. What law is the Title 24 10:10                  11 of? 10:10                  12 A. It's the 24th title in 28 regulations for 10:10                  13 California known as the California Code of 10:10                  14 Regulations, is the whole 28 titles. 10:10                  15 Q. And when you say you're responsible for 10:10                  16 administering the process, what stages does that 10:10                  17 process entail? 10:10                  18 A. We receive rulemaking documents from various 10:10                  19 State agencies, and we conduct public hearings and 10:10                  20 meetings, public comment periods, and then ultimately 10:10                  21 commission reviews and approves -- I shouldn't say 10:10                  22 approve. Takes action on those rulemakings. 10:10                  23 Q. How does it take action on those 10:10                  24 rulemakings? 10:11                  25 A. They either approve, disapprove, further 10:11</p> <p style="text-align: right;">Page 14</p>	<p>1 MS. MILLER-ZIEGLER: Objection to form. 10:12                  2 THE WITNESS: So they're appointed by the 10:12                  3 governor. 10:12                  4 (Discussion off the record) 10:12                  5 MS. MILLER-ZIEGLER: Objection to form. 10:12                  6 I'll be objecting sometimes throughout the 10:12                  7 questioning. If you could just pause before 10:12                  8 answering so that I can have a chance to object. 10:12                  9 THE WITNESS: Certainly. 10:12                  10 MS. MILLER-ZIEGLER: Thank you. 10:12                  11 MR. NERCESSIAN: I can rephrase. 10:12                  12 BY MR. NERCESSIAN: 10:12                  13 Q. So what role do these commissioners play? 10:12                  14 A. They're appointed by the governor, and they 10:12                  15 make up the different requirements that is in 10:12                  16 building standards law. There's ten different types 10:12                  17 of commissioners that are required to be appointed by 10:12                  18 the governor. For example, one represents building 10:13                  19 officials. 10:13                  20 Q. Are there any that represent officials that 10:13                  21 administer electrical systems? 10:13                  22 A. I'm not sure what you mean. 10:13                  23 Q. I can strike that. 10:13                  24 Can you provide another example of a type of 10:13                  25 commissioner that is appointed by the governor that 10:13</p> <p style="text-align: right;">Page 16</p>
<p>1 study or -- sorry. There's four actions they can 10:11                  2 take. 10:11                  3 Q. And it's approve, disapprove, further study 10:11                  4 and -- 10:11                  5 A. Or approve as amend. Sorry. I apologize 10:11                  6 for talking over you. 10:11                  7 Q. Oh. No worries. So the four actions are 10:11                  8 approve, amend, disapprove, further action? 10:11                  9 A. Approve, approve as amend, further study or 10:11                  10 disapprove. 10:11                  11 Q. Okay. Oh. I understand. Thank you. 10:11                  12 A. Uh-huh. 10:11                  13 Q. And you say you interface with ten 10:11                  14 commissioners? 10:11                  15 A. Uh-huh. 10:11                  16 Q. What's the nature of those interactions? 10:11                  17 A. Our office supplies them the rulemaking 10:11                  18 materials so they can make a determination on the 10:12                  19 rulemakings that they're provided. 10:12                  20 Q. And who are these commissioners? 10:12                  21 A. Do I need to name them all, or how -- 10:12                  22 Q. Functionally, who are they? Are they 10:12                  23 commissioners of different State agencies, or are 10:12                  24 they all commissioners of one agency and an agency 10:12                  25 that has multiple commissioners? 10:12</p> <p style="text-align: right;">Page 15</p>	<p>1 you interface with? 10:13                  2 A. Sure. Another representative is from the 10:13                  3 construction industry, so they're a licensed 10:13                  4 contractor. 10:13                  5 Q. Okay. So -- and that's still a role 10:13                  6 appointed by the governor? 10:13                  7 A. Correct. 10:13                  8 Q. What authority does the governor make these 10:13                  9 appointments under? 10:14                  10 A. California Building Standards law, which is 10:14                  11 found in Health and Safety Code, and I don't know the 10:14                  12 exact section number. 10:14                  13 Q. Okay. You referred earlier to rulemaking 10:14                  14 materials that you provide to these commissioners. 10:14                  15 What do those rulemaking materials consist of? 10:14                  16 A. Express Terms, Initial Statement of Reasons. 10:14                  17 That's all I can think of right now. 10:14                  18 Q. Okay. So what are Express Terms? 10:14                  19 A. They're the code language and strikeout and 10:14                  20 underline format so that the people can see and the 10:14                  21 commissioners can see what is being proposed by a 10:14                  22 State agency. 10:14                  23 Q. And what do the commissioners do with those 10:14                  24 Express Terms? 10:15                  25 A. Review them for their technical merit. 10:15</p> <p style="text-align: right;">Page 17</p>

<p>1 Q. And what action do they take with respect to 10:15                  2 those Express Terms? 10:15                  3 A. The four that I spoke of earlier. 10:15                  4 Q. Okay. Do they open up those Express Terms 10:15                  5 for notice and comment with the public? 10:15                  6 A. They're presented at a public meeting, so 10:15                  7 there's an opportunity at that time for the public to 10:15                  8 comment. 10:15                  9 Q. And do each of these ten commissioners 10:15                  10 conduct separate hearings on the Express Terms that 10:15                  11 they've been provided with? 10:15                  12 A. No. 10:15                  13 Q. Is it just one public hearing that all the 10:15                  14 commissioners participate in? 10:15                  15 A. Yes. 10:15                  16 Q. You also referred to Initial Statement of 10:15                  17 Reasons. 10:15                  18 A. Uh-huh. 10:15                  19 Q. And what is that? 10:16                  20 A. It's several statements that are from the 10:16                  21 Government Code specific to the Administrative 10:16                  22 Procedures Act that discuss the rationale, the 10:16                  23 purpose and the reason for a code change, and then 10:16                  24 there's a variety of other statements that talk about 10:16                  25 the benefit to the State, cost to the State, and 10:16                  Page 18</p>	<p>1 Code. We conduct the public merit meetings, and the 10:18                  2 staff reviews the materials and assembles them for 10:18                  3 the public meetings that we conduct. 10:18                  4 Q. All right. How long have you served in that 10:18                  5 role as executive director? 10:18                  6 A. Approximately three and a half years. 10:18                  7 Q. Since roughly February 2016? 10:18                  8 A. Correct. 10:18                  9 Q. Have you performed any other roles at the 10:18                  10 BSC? 10:18                  11 A. Yes. 10:18                  12 Q. What were those roles? 10:18                  13 A. I was an architectural associate and an 10:18                  14 associate architect, and I was employed with them 10:18                  15 since spring of 2012. 10:18                  16 Q. And what did you do as an architectural 10:18                  17 associate? 10:18                  18 A. Reviewed rulemaking documents, prepared them 10:18                  19 for meetings and the public comment phase. 10:19                  20 Q. And when did you serve in that role? Was 10:19                  21 that earlier or after you were an associate 10:19                  22 architect? 10:19                  23 A. I did that while I was an associate 10:19                  24 architect and an architectural associate. 10:19                  25 Q. Oh. You held those positions 10:19                  Page 20</p>
<p>1 that's all I can remember specifically right now 10:16                  2 without looking at the document. 10:16                  3 Q. Okay. So the Building Standards Commission 10:16                  4 is also known as the CBSC; correct? 10:16                  5 A. Yes. 10:16                  6 Q. Or the BSC? 10:16                  7 A. Correct. 10:16                  8 Q. What's the relationship between the Building 10:16                  9 Standards Commission and the California Department of 10:16                  10 General Services? 10:16                  11 A. We are a commission within DGS. 10:16                  12 Q. Does DGS play any independent role in this 10:16                  13 rulemaking process? 10:16                  14 A. No. 10:17                  15 Q. Do any other State agencies play a role? 10:17                  16 MS. MILLER-ZIEGLER: Objection as vague. 10:17                  17 BY MR. NERCESSIAN: 10:17                  18 Q. Do any State agencies play a role in the 10:17                  19 process of administering Title 24? 10:17                  20 A. No. 10:17                  21 Q. What are your responsibilities as executive 10:17                  22 director of BCS -- BSC? 10:17                  23 A. Oversee staff and the budget, ensure that 10:17                  24 the process is followed, specifically that meeting 10:17                  25 notices are supplied according to the Government 10:17                  Page 19</p>	<p>1 simultaneously? 10:19                  2 A. Well, I can't remember the exact time I 10:19                  3 got -- I received a promotion during that time. 10:19                  4 Q. Did your role change at all after the 10:19                  5 promotion? 10:19                  6 A. No. 10:19                  7 Q. Did your responsibilities change at all 10:19                  8 after the promotion? 10:19                  9 A. No. 10:19                  10 Q. In that associate role, what role did you 10:19                  11 play, if any, in administering the processes related 10:19                  12 to the adoption, approval, publication and/or 10:20                  13 implementation of the California Building Codes? 10:20                  14 MS. MILLER-ZIEGLER: Objection to form. 10:20                  15 MR. NERCESSIAN: I can rephrase. 10:20                  16 BY MR. NERCESSIAN: 10:20                  17 Q. In that role as an architectural associate 10:20                  18 and associate architect, did you play any role in 10:20                  19 administering the processes related to the adoption 10:20                  20 of the California Building Codes? 10:20                  21 A. Yes. 10:20                  22 Q. What was that involvement? 10:20                  23 A. Reviewed documents from State agencies, 10:20                  24 prepared meeting materials so that they could be 10:20                  25 publicly viewed. 10:20                  Page 21</p>

1 Q. And did you play any role in the processes 10:20  
 2 related to the approval of California's Building 10:20  
 3 Codes? 10:20  
 4 A. I'm not sure I understand that question. 10:20  
 5 Q. Do you understand there to be any difference 10:20  
 6 between the processes related to the adoption of 10:21  
 7 California's Building Codes and their approval? 10:21  
 8 A. I would just say that the process sets up 10:21  
 9 the end game, if you will, for the commission to take 10:21  
 10 action. 10:21  
 11 Q. Okay. And when the building commission 10:21  
 12 takes action, what is the output of this process? 10:21  
 13 A. If the standard -- 10:21  
 14 MS. MILLER-ZIEGLER: Objection to form. 10:21  
 15 BY MR. NERCESSIAN: 10:21  
 16 Q. You can answer the question. 10:21  
 17 A. Okay. Thanks. If the regulations are 10:21  
 18 approved by the commission, they're assembled for the 10:21  
 19 publisher so the publisher can develop the next 10:21  
 20 edition of the code. 10:22  
 21 Q. And what's the latest edition of the code? 10:22  
 22 A. The current effective code is a 2016 10:22  
 23 edition. 10:22  
 24 Q. And have the rulemaking processes for 10:22  
 25 revision after the 2016 edition taken place? 10:22

Page 22

1 A. Yes. 10:22  
 2 Q. And what edition of the code do those 10:22  
 3 processes relate to? 10:22  
 4 A. The 2019 edition. 10:22  
 5 Q. And when does that become effective? 10:22  
 6 A. January 1st of 2020. 10:22  
 7 Q. Before you were employed by the California 10:22  
 8 Building Standards Commission, did you have any 10:22  
 9 experience with the California Building Codes in 10:22  
 10 previous roles? 10:23  
 11 A. Yes. 10:23  
 12 Q. What was that involvement? 10:23  
 13 A. Utilizing them for the design of state 10:23  
 14 buildings. 10:23  
 15 Q. And what position did you utilize them in? 10:23  
 16 A. I was an architectural associate for the 10:23  
 17 Department of General Services. 10:23  
 18 Q. And as an architectural associate at the 10:23  
 19 Department of General Services, how did you utilize 10:23  
 20 the California Building Codes? 10:23  
 21 MS. MILLER-ZIEGLER: Objection as outside 10:23  
 22 the scope of the subpoena. 10:23  
 23 BY MR. NERCESSIAN: 10:23  
 24 Q. You can answer the question. 10:23  
 25 A. For the design and construction of state 10:23

Page 23

1 buildings. 10:23  
 2 Q. And by that, do you mean you developed 10:23  
 3 construction drawings so that they complied with the 10:23  
 4 California Building Standards Code? 10:23  
 5 A. Yes. 10:23  
 6 MS. MILLER-ZIEGLER: Objection to form. 10:23  
 7 BY MR. NERCESSIAN: 10:24  
 8 Q. Show you a document. We can mark this as 10:24  
 9 Exhibit 1. 10:24  
 10 (Exhibit 1 marked) 10:24  
 11 BY MR. NERCESSIAN: 10:24  
 12 Q. All right. You've been handed a document 10:24  
 13 marked as Exhibit 1. Ms. Marvelli, do you recognize 10:24  
 14 this document? 10:25  
 15 A. Yes. 10:25  
 16 Q. And what is this document? 10:25  
 17 A. It's what I was sent a couple weeks ago to 10:25  
 18 the office. 10:25  
 19 Q. And this is a letter with respect to the 10:25  
 20 subpoena for this deposition; correct? 10:25  
 21 A. Yes. 10:25  
 22 Q. The letter includes as Exhibit A the opinion 10:25  
 23 of the U.S. Court of Appeals for the District of 10:25  
 24 Columbia with respect to this dispute. 10:25  
 25 MS. MILLER-ZIEGLER: Objection. This hasn't 10:25

Page 24

1 been provided to us in the past. 10:25  
 2 MR. NERCESSIAN: Okay. Your objection is 10:25  
 3 noted. 10:25  
 4 BY MR. NERCESSIAN: 10:25  
 5 Q. Have you read this opinion? 10:25  
 6 A. Not the whole thing. 10:25  
 7 Q. When did you read this opinion? 10:25  
 8 A. I read part of it when I first received it. 10:26  
 9 Q. Were you aware of this opinion at any point 10:26  
 10 before you received this letter? 10:26  
 11 A. No. 10:26  
 12 Q. Do you have any knowledge of the dispute 10:26  
 13 between Public.Resource and the plaintiffs in this 10:26  
 14 lawsuit? 10:26  
 15 A. I have some knowledge. 10:26  
 16 Q. And what is that knowledge? 10:26  
 17 A. Just information that is on the Internet 10:26  
 18 about this particular -- 10:26  
 19 Q. And so what do you know about the case? 10:26  
 20 A. Just that there's a dispute between the two 10:26  
 21 groups. 10:26  
 22 Q. Have you had any discussions about this case 10:26  
 23 at any point? 10:26  
 24 A. No. 10:26  
 25 Q. One of the issues in this case is what 10:26

Page 25

1 copyright protection there is and standards that are 10:26  
 2 incorporated into other law. Are you familiar with 10:26  
 3 standards that standard development organizations put 10:26  
 4 out? 10:27  
 5 MR. FEE: Objection to form. 10:27  
 6 BY MR. NERCESSIAN: 10:27  
 7 Q. Have you had any involvement with standards 10:27  
 8 in -- over the course of your employment at the 10:27  
 9 Building Standards Commission? 10:27  
 10 A. I'm sorry, I'm not following that question. 10:27  
 11 Q. In your role at the Building Standards 10:27  
 12 Commission, have you interacted with any industry 10:27  
 13 standards? 10:27  
 14 MS. MILLER-ZIEGLER: Objection to form. 10:27  
 15 BY MR. NERCESSIAN: 10:27  
 16 Q. You can answer the question. 10:27  
 17 A. I don't know what you mean by "interacted." 10:27  
 18 Q. Have you taken any actions with -- have you 10:27  
 19 reviewed any industry standards in your role? 10:27  
 20 MR. FEE: Objection to form. 10:27  
 21 THE WITNESS: I guess I don't know what you 10:27  
 22 mean by "reviewed." 10:27  
 23 BY MR. NERCESSIAN: 10:27  
 24 Q. Have you read any industry standards in your 10:27  
 25 role at the Building Standards Commission? 10:28

Page 26

1 MR. FEE: Objection to form. 10:28  
 2 BY MR. NERCESSIAN: 10:28  
 3 Q. You can answer. 10:28  
 4 A. I'm not following that. 10:28  
 5 Q. So what is it about my question that you 10:28  
 6 don't understand? I can rephrase. 10:28  
 7 A. I guess I'm trying to understand if it's 10:28  
 8 specific about a certain standard or just the 10:28  
 9 standards in general. 10:28  
 10 Q. Just standards in general. Have you ever 10:28  
 11 reviewed any industry standards over the course of 10:28  
 12 your employment at the Building Standards Commission? 10:28  
 13 MR. FEE: Objection to form. 10:28  
 14 THE WITNESS: I suppose I have, but I 10:28  
 15 couldn't tell you specifics on what that would be. 10:28  
 16 BY MR. NERCESSIAN: 10:28  
 17 Q. Have you had any interactions with standard 10:29  
 18 development organizations over the course of your 10:29  
 19 employment at the Building Standards Commission? 10:29  
 20 A. Can you repeat the question? I'm sorry. 10:29  
 21 Q. Have you had any interactions with standard 10:29  
 22 development organizations over the course of your 10:29  
 23 employment at the Building Standards Commission? 10:29  
 24 A. I think I'm trying to understand the 10:29  
 25 difference between standards and the code developers. 10:29

Page 27

1 Q. What do you understand the difference to be? 10:29  
 2 A. Well, there's the reference standards, which 10:29  
 3 are very detail-oriented, and then there is the code 10:30  
 4 developers where the reference standards are referred 10:30  
 5 to. 10:30  
 6 Q. So do you have any familiarity with 10:30  
 7 reference standards from your employment at the 10:30  
 8 Building Standards Commission? 10:30  
 9 A. I have familiarity. 10:30  
 10 Q. And what's that experience with the 10:30  
 11 reference standards that you have? 10:30  
 12 A. That they're referenced in the model codes 10:30  
 13 that California is required to adopt. 10:30  
 14 Q. And why is California required to adopt 10:30  
 15 those model codes? 10:30  
 16 A. That's part of our building standards law. 10:30  
 17 Q. What does the Building Standards Commission 10:30  
 18 do with those reference codes? 10:30  
 19 MS. MILLER-ZIEGLER: Objection to form. 10:30  
 20 BY MR. NERCESSIAN: 10:31  
 21 Q. What -- I can rephrase. 10:31  
 22 A. Okay. 10:31  
 23 Q. What actions does the Building Standards 10:31  
 24 Commission take, if any, with respect to those 10:31  
 25 reference codes? 10:31

Page 28

1 A. They take the same action that they do with 10:31  
 2 the model codes, the four we spoke of earlier. 10:31  
 3 Q. Okay. So then I'd like to discuss one of 10:31  
 4 those four actions, approve as amended. 10:31  
 5 A. Okay. 10:31  
 6 Q. When the Building Standards Commission 10:31  
 7 approves as amend a reference code, what does that 10:31  
 8 mean? 10:31  
 9 A. They may be approving a change from what was 10:31  
 10 proposed. 10:32  
 11 Q. And why might it take those actions? 10:32  
 12 A. There could be a reason based on the 10:32  
 13 nine-point criteria that they need to take a 10:32  
 14 different action, then approve. 10:32  
 15 Q. What is this nine-point criteria you're 10:32  
 16 referring to? 10:32  
 17 A. It's the basis in which the State agencies 10:32  
 18 state that they're -- the building standards may be 10:32  
 19 approved, and it's in 18930, I believe, of the Health 10:32  
 20 and Safety Code. 10:32  
 21 Q. And what are those nine criteria? 10:32  
 22 A. I'll do my best. There's -- one of them is 10:32  
 23 they cannot conflict, overlap or duplicate another 10:33  
 24 code, arbitrary and capricious, they have to meet -- 10:33  
 25 they can't violate fire life safety as prescribed -- 10:33

Page 29



1 or as determined by the State Fire Marshal. I can't 10:33  
 2 think of them all at the moment. 10:33  
 3 Q. And if one of these criteria is met, then 10:33  
 4 the California Building Standards Commission may 10:33  
 5 recommend amending a reference standard in its 10:33  
 6 adoption; is that correct? 10:33  
 7 A. If one of the criteria is not met, yes. 10:33  
 8 Q. If one of the criteria is not met? 10:33  
 9 A. Yeah. 10:33  
 10 Q. What happens if all of the criteria are met? 10:33  
 11 A. I didn't hear you. 10:33  
 12 Q. What happens if all of the criteria are met? 10:33  
 13 A. Generally the commission approves the 10:34  
 14 package. 10:34  
 15 Q. And where the commission chooses to amend a 10:34  
 16 reference standard in its adoption, how does the 10:34  
 17 commission accomplish that incorporation? 10:34  
 18 MR. FEE: Objection. Form. 10:34  
 19 MS. MILLER-ZIEGLER: Objection to form. 10:34  
 20 BY MR. NERCESSIAN: 10:34  
 21 Q. Do you understand the question? 10:34  
 22 A. No. 10:34  
 23 Q. Does the commission incorporate by reference 10:34  
 24 any reference standards? 10:34  
 25 A. Yes. 10:34

Page 30

1 Q. What does that mean? What -- strike that. 10:34  
 2 So the way you're using "incorporate by 10:35  
 3 reference," what does it mean to you? 10:35  
 4 A. It would be part of the model code. 10:35  
 5 Q. So that's the incorporation. 10:35  
 6 A. Uh-huh. 10:35  
 7 Q. But does the code incorporate the standard 10:35  
 8 by referencing a reference standard? 10:35  
 9 MS. MILLER-ZIEGLER: Objection to form. 10:35  
 10 THE WITNESS: Can you repeat the question? 10:35  
 11 BY MR. NERCESSIAN: 10:35  
 12 Q. Yes. Does the code incorporate a reference 10:35  
 13 standard by referencing that standard? 10:35  
 14 A. Yes. 10:35  
 15 Q. How does it reference it? 10:35  
 16 MR. FEE: Object to the form. 10:36  
 17 BY MR. NERCESSIAN: 10:36  
 18 Q. You can answer. 10:36  
 19 A. There's a number that is referenced in the 10:36  
 20 model code to the reference standard. 10:36  
 21 Q. So if somebody is reading the California 10:36  
 22 Building Standards Code, do they have to refer to 10:36  
 23 another reference code to understand it? 10:36  
 24 MR. FEE: Objection to form. 10:36  
 25 THE WITNESS: In some cases, yes. 10:36

Page 31

1 BY MR. NERCESSIAN: 10:36  
 2 Q. In what cases? 10:36  
 3 MR. FEE: Objection to form. 10:36  
 4 THE WITNESS: That's too broad of a 10:36  
 5 question. I don't -- 10:36  
 6 BY MR. NERCESSIAN: 10:36  
 7 Q. In what cases would a person not have to 10:36  
 8 refer to separate reference standard? 10:36  
 9 MR. FEE: Objection to form. 10:36  
 10 MR. YEN: You can answer -- 10:36  
 11 THE WITNESS: Okay. 10:36  
 12 MR. YEN: -- if you understand the question. 10:36  
 13 THE WITNESS: There's instances where part 10:36  
 14 of the reference standard is in -- reprinted or in 10:37  
 15 the code, but I couldn't give you specifics. 10:37  
 16 BY MR. NERCESSIAN: 10:37  
 17 Q. When you say that there are instances that 10:37  
 18 parts of a reference standard are reprinted within 10:37  
 19 the code, do you mean that they appear within the 10:37  
 20 body of the California code as printed? 10:37  
 21 MS. MILLER-ZIEGLER: Objection as leading. 10:37  
 22 BY MR. NERCESSIAN: 10:37  
 23 Q. You can answer. 10:37  
 24 A. Again, I don't have the code in front of me 10:37  
 25 to be able to give you that answer. 10:37

Page 32

1 Q. Okay. In that case, we can mark this next 10:37  
 2 in order. 10:38  
 3 (Exhibit 2 marked) 10:38  
 4 MS. MILLER-ZIEGLER: Where is this from? 10:38  
 5 MR. NERCESSIAN: This is from the Internet 10:39  
 6 archive. 10:39  
 7 MS. MILLER-ZIEGLER: Generally the Internet 10:39  
 8 archive versions have some annotation indicating that 10:39  
 9 they're from the Internet archive which this doesn't 10:39  
 10 have. Has this been modified? 10:39  
 11 MR. NERCESSIAN: It's just the PDF that's 10:39  
 12 available on the Internet archive. 10:39  
 13 MS. MILLER-ZIEGLER: There's no other front 10:39  
 14 matter that's associated with it? 10:39  
 15 MR. NERCESSIAN: No. There was a PDF linked 10:39  
 16 directly there. There is the notation that appears 10:39  
 17 on the front that you see. 10:39  
 18 MS. MILLER-ZIEGLER: We'll object to the 10:39  
 19 unauthorized copy then. 10:39  
 20 MR. FEE: You obviously put cover sheets on 10:39  
 21 this, too? You're not claiming that this cover sheet 10:39  
 22 was part of the archive? 10:39  
 23 MR. NERCESSIAN: No, not claiming the cover 10:39  
 24 sheet was part of it. That's just to break it up. 10:39  
 25 MR. FEE: I object to that as well. 10:39

Page 33

<p>1 MS. MILLER-ZIEGLER: We'll also object to 10:40                  2 the authenticity of this. 10:40                  3 BY MR. NERCESSIAN: 10:40                  4 Q. All right. Ms. Marvelli, are you familiar 10:40                  5 with this document? 10:40                  6 MR. FEE: Objection to form. 10:40                  7 THE WITNESS: Nope. 10:40                  8 BY MR. NERCESSIAN: 10:40                  9 Q. Does it appear to -- well, what makes you 10:40                  10 say that? 10:40                  11 A. Well, there's information that is not part 10:40                  12 of what we publish as a California Electrical Code on 10:40                  13 the cover. 10:40                  14 Q. I represent -- okay. So this is deposition 10:40                  15 Exhibit Number 2, and what's the information on the 10:41                  16 cover that you -- the annotations -- strike that. 10:42                  17 We can mark this next in order. 10:42                  18 (Exhibit 3 marked) 10:42                  19 BY MR. NERCESSIAN: 10:42                  20 Q. All right. You have been handed an exhibit 10:42                  21 marked for identification as Deposition Exhibit 3. 10:43                  22 Do you recognize this document? 10:43                  23 A. It appears as though it's a print of our web 10:43                  24 page -- or code's web page. 10:43                  25 Q. And what does the California Building 10:43                  Page 34</p>	<p>1 Q. And previously, you testified that it goes 10:45                  2 into effect January 1st, 2020? 10:45                  3 A. Correct. 10:45                  4 Q. Until the 2019 edition goes into effect, the 10:45                  5 2016 California Building Standards Code will be the 10:45                  6 law; correct? 10:45                  7 MR. FEE: Objection to form. 10:45                  8 THE WITNESS: Yes. 10:45                  9 BY MR. NERCESSIAN: 10:45                  10 Q. And the 2016 California Building Code will 10:45                  11 be effective until the 2019 edition goes into effect; 10:45                  12 correct?                  13 A. Yes. 10:46                  14 Q. How many parts does the 2019 triennial 10:46                  15 edition of Title 24 have? 10:46                  16 A. Thirteen. 10:46                  17 Q. Does each part pertain to a different 10:46                  18 subject matter? 10:46                  19 A. Yes. 10:46                  20 Q. So, for instance, Part 1 is the California 10:46                  21 Administrative Code; correct? 10:46                  22 A. Yes. 10:46                  23 Q. And Part 3 is the California Electrical 10:46                  24 Code; correct? 10:46                  25 A. Correct. 10:46                  Page 36</p>
<p>1 Commission display on the code's web page on its 10:43                  2 site? 10:43                  3 MS. MILLER-ZIEGLER: Objection to form. 10:43                  4 THE WITNESS: The 12 parts of Title 24. 10:43                  5 BY MR. NERCESSIAN: 10:43                  6 Q. How often does CBSC issue a new Title 24? 10:43                  7 A. Triennially, every three years, but we also 10:43                  8 could have emergencies change without regulatory 10:43                  9 effect or an intervening supplement which would amend 10:44                  10 any edition of the code. 10:44                  11 Q. And you'll note, if you look at the bottom 10:44                  12 of the page, there's a URL there. Can you read that 10:44                  13 URL, please? 10:44                  14 A. Sure. <a href="https://www.dgs.ca.gov/BSC/Codes">https://www.dgs.ca.gov/BSC/Codes</a>. 10:44                  15 Q. Thank you. And that's a website that's 10:44                  16 administered by the State; is that correct? 10:45                  17 A. Yes. 10:45                  18 Q. And the "DGS" in that subdomain stands for 10:45                  19 the Department of General Services; correct? 10:45                  20 A. Yes. 10:45                  21 Q. And what does the "BSC" stand for? 10:45                  22 A. Building Standards Commission. 10:45                  23 Q. When was the 2019 edition of Title 24 10:45                  24 published? 10:45                  25 A. On or around July 1st of this year. 10:45                  Page 35</p>	<p>1 Q. Does CBSC currently host any parts of the 10:46                  2 2016 triennial edition of the California Building 10:46                  3 Standards Code on the BSC website? 10:46                  4 A. I don't know what you mean by "host." 10:46                  5 Q. By "host," I mean does it store an 10:46                  6 accessible version of the code on the BSC website? 10:47                  7 A. No. I believe it's all -- points to the 10:47                  8 model code publisher. 10:47                  9 Q. And CBSC does not currently host any parts 10:47                  10 for any edition of the California Building Standards 10:47                  11 Code on the BSC website; correct? 10:47                  12 A. I'm not certain of that. 10:47                  13 Q. On the second page of this exhibit, there's 10:47                  14 a heading that reads "2016 Triennial Edition of 10:47                  15 Title 24." 10:47                  16 A. Uh-huh. 10:47                  17 Q. Does CBSC currently host a complete edition 10:47                  18 of the 2016 version of Title 24 on the BSC website? 10:47                  19 A. It points to the model code developers much 10:48                  20 like the '19 code. 10:48                  21 Q. And that's the same for the 2013 edition; 10:48                  22 correct?                  23 A. Correct. 10:48                  24 Q. This web page also, in a section marked 10:48                  25 "Purchase the Codes," directs the user to public 10:48                  Page 37</p>

1 code -- strike that. 10:48  
 2 In a section called "Purchase the Codes," 10:48  
 3 similarly, the website directs the user to the 10:48  
 4 publisher's websites; correct? 10:48  
 5 MS. MILLER-ZIEGLER: Objection as leading. 10:48  
 6 THE WITNESS: Yes. 10:48  
 7 BY MR. NERCESSIAN: 10:48  
 8 Q. One of those publishers is the International 10:48  
 9 Code Council? 10:48  
 10 A. Yes. 10:49  
 11 Q. And what parts is the International Code 10:49  
 12 Council responsible for publishing? 10:49  
 13 A. It's listed here on the web page. Would you 10:49  
 14 like me to read them all or -- 10:49  
 15 Q. No. 10:49  
 16 A. Okay. 10:49  
 17 Q. And the web page lists the parts that are 10:49  
 18 available through each publisher; correct? 10:49  
 19 A. Yes. 10:49  
 20 Q. Does the State of California, to your 10:49  
 21 knowledge, make the full text of the California 10:49  
 22 Building Standards Code available to the public? 10:49  
 23 MR. FEE: Objection to form. 10:49  
 24 THE WITNESS: Yes. 10:49  
 25 BY MR. NERCESSIAN: 10:49  
 Page 38

1 Q. How? 10:49  
 2 MR. FEE: Same objection. 10:49  
 3 THE WITNESS: It's viewable on our website 10:49  
 4 through the publisher. 10:49  
 5 BY MR. NERCESSIAN: 10:49  
 6 Q. Linked at pages hosted by the publisher -- 10:49  
 7 MS. MILLER-ZIEGLER: Objection. 10:50  
 8 BY MR. NERCESSIAN: 10:50  
 9 Q. -- correct? 10:50  
 10 MS. MILLER-ZIEGLER: Objection as leading. 10:50  
 11 THE WITNESS: Correct. 10:50  
 12 MR. YEN: Armen, I just want to clarify 10:50  
 13 something. When you're referring to the State of 10:50  
 14 California, are you referring to the entire State of 10:50  
 15 California government, or are you just referring to 10:50  
 16 the Building Standards Commission? Because -- 10:50  
 17 MR. NERCESSIAN: I was asking to her 10:50  
 18 knowledge, is she aware that the State of California 10:50  
 19 publishes. 10:50  
 20 MR. YEN: So the entire State of California, 10:50  
 21 not just the Building Standards Commission? So -- 10:50  
 22 MR. NERCESSIAN: Not just the Building 10:50  
 23 Standards Commission. 10:50  
 24 MR. YEN: All right. 10:50  
 25 MR. NERCESSIAN: But just to her knowledge. 10:50  
 Page 39

1 MR. YEN: I just wanted to clarify that you 10:50  
 2 weren't just referring to the commission. 10:50  
 3 MR. NERCESSIAN: No. 10:50  
 4 MR. YEN: Okay. 10:50  
 5 BY MR. NERCESSIAN: 10:50  
 6 Q. All right. On the third page of the 10:50  
 7 exhibit, there's a -- under a heading that says 10:50  
 8 "California Building Standards Code," there's a 10:50  
 9 description that reads "The California Building 10:50  
 10 Standards Code is a compilation of three types of 10:50  
 11 building standards from different origins." 10:50  
 12 What are the sources of the California 10:51  
 13 Building Standards Code? 10:51  
 14 A. California amendments which are proposed by 10:51  
 15 State agencies, the model codes that California is 10:51  
 16 required by law to adopt. That's two kinds. It's a 10:51  
 17 blend. 10:52  
 18 Q. So this statement identifies three. 10:52  
 19 A. Uh-huh. 10:52  
 20 Q. What makes you -- so -- and we discussed two 10:52  
 21 kinds. Is there not a third? 10:52  
 22 A. I'd have to read this because I'm not 10:52  
 23 understanding what -- that have been adopted by State 10:52  
 24 without change. Okay, I get it. We recently went 10:52  
 25 through a web page change, so I needed to read this 10:52  
 Page 40

1 because I haven't read this yet. 10:52  
 2 Q. Okay. 10:53  
 3 A. So I guess I understand why they're saying 10:53  
 4 three. So there's building standards that have been 10:53  
 5 adopted by the State without change, and they contain 10:53  
 6 model codes, and then there's building standards -- 10:53  
 7 standard, excuse me, that have been adopted and 10:53  
 8 adapted from national model codes to address 10:53  
 9 California's needs, which is what I talked about, 10:53  
 10 California amendments, and then there's building 10:53  
 11 standards authorized by California legislature that 10:53  
 12 constitutes amendments not covered by national model 10:53  
 13 codes. 10:53  
 14 Q. Got it. So you think these three categories 10:53  
 15 referred to here in this blurb are accurate? 10:53  
 16 A. Yes. 10:53  
 17 Q. It goes on to read that "All occupancies in 10:53  
 18 California are subject to national model codes 10:54  
 19 adopted into Title 24." Do you see that language? 10:54  
 20 A. Yes. 10:54  
 21 Q. When the website says that Title -- the 10:54  
 22 national model codes adopted into Title 24 adopt -- 10:54  
 23 strike that. 10:54  
 24 When the website says that the national 10:54  
 25 model codes adopted into Title 24 apply to all 10:54  
 Page 41

1 occupancies in California, do they apply to 10:54  
 2 residences? 10:54  
 3 MS. MILLER-ZIEGLER: Objection to form. 10:54  
 4 THE WITNESS: Yes. 10:54  
 5 BY MR. NERCESSIAN: 10:54  
 6 Q. Do they apply to office buildings? 10:54  
 7 A. Yes. 10:54  
 8 Q. Do they apply to schools? 10:54  
 9 A. Yes. 10:54  
 10 Q. Do the national model codes adopted into 10:54  
 11 Title 24 apply to hospitals? 10:54  
 12 A. Yes. 10:54  
 13 MS. MILLER-ZIEGLER: Objection to form. 10:54  
 14 BY MR. NERCESSIAN: 10:55  
 15 Q. Do they apply to government buildings? 10:55  
 16 A. Yes. 10:55  
 17 Q. Are there any occupancies in California that 10:55  
 18 the national model codes adopted into Title 24 do not 10:55  
 19 apply to? 10:55  
 20 MS. MILLER-ZIEGLER: Objection to form. 10:55  
 21 THE WITNESS: I don't have an answer for 10:55  
 22 that. 10:55  
 23 BY MR. NERCESSIAN: 10:55  
 24 Q. Because it applies to all occupancies in 10:55  
 25 California; correct? 10:55

Page 42

1 MS. MILLER-ZIEGLER: Objection to form. 10:55  
 2 THE WITNESS: Yes. 10:55  
 3 BY MR. NERCESSIAN: 10:55  
 4 Q. So we established earlier that Part 3 of 10:55  
 5 Title 24 is the California Electrical Code. What 10:55  
 6 sources is the California Electrical Code based on? 10:55  
 7 A. NFPA 70 -- 10:55  
 8 Q. NFPA 70. 10:55  
 9 A. -- and California amendments. 10:56  
 10 Q. And NFPA 70 is also known as the National 10:56  
 11 Electrical Code? 10:56  
 12 A. Yes. 10:56  
 13 Q. What version of the National Electrical Code 10:56  
 14 are the 2019 -- strike that. 10:56  
 15 What version of the National Electrical Code 10:56  
 16 is the 2019 version of the California Electrical Code 10:56  
 17 based on? 10:56  
 18 MS. MILLER-ZIEGLER: Objection to form. 10:56  
 19 MR. YEN: You can answer if you know. 10:56  
 20 THE WITNESS: Okay. Sorry. 10:56  
 21 MR. YEN: If you understand. 10:56  
 22 THE WITNESS: The 2017 National Electrical 10:56  
 23 Code. 10:56  
 24 BY MR. NERCESSIAN: 10:56  
 25 Q. And what version of the National Electrical 10:56

Page 43

1 Code was the 2016 version of the California 10:56  
 2 Electrical Code based on? 10:56  
 3 MS. MILLER-ZIEGLER: Objection to form. 10:56  
 4 THE WITNESS: The 2014 electrical code. 10:56  
 5 BY MR. NERCESSIAN: 10:56  
 6 Q. So you described that standard as NFPA 70. 10:57  
 7 What does "NFPA" stand for? 10:57  
 8 A. National Fire Protection Association. 10:57  
 9 Q. Is that the same National Fire Protection 10:57  
 10 Association that is a named plaintiff in this case? 10:57  
 11 MR. FEE: Objection to form. 10:57  
 12 THE WITNESS: Yes. 10:57  
 13 BY MR. NERCESSIAN: 10:57  
 14 Q. Can you describe how the CBSC developed the 10:57  
 15 2019 edition of the California Electrical Code? 10:57  
 16 A. Yes. 10:57  
 17 Q. Please do. 10:57  
 18 A. Okay. Again, state law requires the State 10:57  
 19 agencies to adopt the most recent edition of model 10:57  
 20 codes, and in the case of the electrical code, it 10:57  
 21 would be the 2017 National Electrical Code. The 10:57  
 22 State agencies carry forward existing amendments in 10:58  
 23 some cases from the previous edition. 10:58  
 24 They may make amendments to the new edition 10:58  
 25 that they're looking at. They may have pre-cycle 10:58

Page 44

1 workshops to vet any changes that are necessary. 10:58  
 2 Then their rulemaking documents are submitted to the 10:58  
 3 Building Standards Commission staff, and they are -- 10:58  
 4 those files are reviewed for compliance with the 10:58  
 5 Administrative Procedures Act and the building 10:58  
 6 standards law. 10:58  
 7 They're then assembled for what's called a 10:58  
 8 code advisory committee, and that committee is made 10:58  
 9 up of technical experts in the field. They're not 10:59  
 10 paid by the State other than their per diem to 10:59  
 11 participate in the technical review of the proposed 10:59  
 12 changes and adoption of the code. 10:59  
 13 They provide a recommendation at a public 10:59  
 14 meeting to the State agency and also the public, and 10:59  
 15 that recommendation is considered by the State 10:59  
 16 agency, and the State agency may make additional 10:59  
 17 changes to their proposed code changes. 10:59  
 18 The Building Standards Commission then 10:59  
 19 assembles that material and puts it out for a 45-day 10:59  
 20 comment period which is noticed in the Office of 10:59  
 21 Administrative Law's notice registry. There may be 10:59  
 22 additional comments if necessary. 10:59  
 23 The State agencies respond to any comments 10:59  
 24 in their Final Statement of Reasons, and the Final 11:00  
 25 Statement of Reason and the Final Express Terms and 11:00

Page 45

1 other rulemaking documents are presented to the 11:00  
 2 commission at a public meeting where the commission 11:00  
 3 takes action on the rulemaking package. 11:00  
 4 Q. Got it. And it is the commission that has 11:00  
 5 the final say on what language ultimately makes it 11:00  
 6 into the version of the California Electrical Code? 11:00  
 7 MS. MILLER-ZIEGLER: Objection. Form. 11:00  
 8 THE WITNESS: The commission looks at all of 11:00  
 9 the public comments that were considered, the 11:00  
 10 Statement of Reasons, and they rely on the 11:00  
 11 determination of the State agency as well, and that 11:00  
 12 is all weighed, and as long as it meets the 11:00  
 13 nine-point criteria, the commission may take action 11:00  
 14 on the package to approve it. 11:00  
 15 BY MR. NERCESSIAN: 11:01  
 16 Q. And that's the nine-point criteria you 11:01  
 17 referred to earlier where if one of the criteria is 11:01  
 18 not met, there might be reason for an amendment; 11:01  
 19 correct? 11:01  
 20 A. Possibly, yes. 11:01  
 21 Q. You referred to -- in this to there being a 11:01  
 22 code advisory committee. 11:01  
 23 A. Uh-huh. Yes. Sorry. 11:01  
 24 Q. Where does that advisory committee reside? 11:01  
 25 A. It's assembled every two years for each 11:01  
 Page 46

1 by State agencies, the timing -- strike that. Not 11:03  
 2 the timing. The initial submittal rulemaking 11:03  
 3 documents that are required to be submitted, the 11:03  
 4 actions that can be taken by the commission. That's 11:03  
 5 what I can remember off the top of my head. 11:03  
 6 Q. And all those rules are directed at 11:03  
 7 governing California state administrative processes; 11:03  
 8 correct? 11:03  
 9 MS. MILLER-ZIEGLER: Objection to form. 11:03  
 10 MR. FEE: Object to form. 11:03  
 11 THE WITNESS: Not sure I follow that 11:03  
 12 question. 11:03  
 13 BY MR. NERCESSIAN: 11:03  
 14 Q. I can rephrase. Who is the audience for 11:03  
 15 Part 1 of Title 24? 11:04  
 16 MR. FEE: Objection to form. 11:04  
 17 THE WITNESS: That code, administrative code 11:04  
 18 is available for anybody, so it's the public, it 11:04  
 19 could be State agencies, it could be code advisory 11:04  
 20 committee members, it could be the commission. 11:04  
 21 BY MR. NERCESSIAN: 11:04  
 22 Q. Got it. 11:04  
 23 A. Uh-huh. Could we take a break for a couple 11:04  
 24 minutes? Would that be okay? 11:04  
 25 Q. There's no question pending, so okay. 11:04  
 Page 48

1 triennial coded option, and a call for application 11:01  
 2 goes out by the Building Standards Commission staff, 11:01  
 3 and it's very specific in the member makeup of each 11:01  
 4 code advisory committee, and that's laid out in the 11:01  
 5 California Administrative Code, which is Part 1 of 11:01  
 6 Title 24, and each of -- each committee has 11:01  
 7 approximately nine members, and they are selected by 11:01  
 8 the commission every two years, and then those code 11:02  
 9 advisory committees serve for the three-year term, 11:02  
 10 and so they're a mix of technical experts in the 11:02  
 11 field. 11:02  
 12 Q. Okay. And Part 1 of Title 24 which 11:02  
 13 constitutes the California Administrative Code then 11:02  
 14 lays out the rules that the agencies must follow for 11:02  
 15 the rulemaking process? 11:02  
 16 MS. MILLER-ZIEGLER: Objection. Leading. 11:02  
 17 MR. FEE: Objection to form. 11:02  
 18 BY MR. NERCESSIAN: 11:02  
 19 Q. So you testified earlier that Part 1 of 11:02  
 20 Title 24 constitutes the California Administrative 11:02  
 21 Code; correct? 11:02  
 22 A. Uh-huh. 11:02  
 23 Q. What procedures does the California 11:02  
 24 Administrative Code govern? 11:03  
 25 A. Appeals and petitions, pre-cycle activities 11:03  
 Page 47

1 1 A. Okay. Pause for a minute. 11:04  
 2 VIDEO OPERATOR: We're off the record. It's 11:04  
 2 11:04 3 .  
 3 11:04  
 4 4 (Recess) 11:04  
 5 5 VIDEO OPERATOR: Okay. We're back on the 11:21  
 6 6 record. It's 11:22. 11:21  
 7 7 BY MR. NERCESSIAN: 11:21  
 8 8 Q. Ms. Marvelli, have you heard of the term 11:22  
 9 9 "incorporation by adoption"? 11:22  
 10 10 A. Yes. 11:22  
 11 11 Q. And what does that term mean? 11:22  
 12 12 A. I don't know. 11:22  
 13 13 Q. In what context have you heard the term, 11:22  
 14 14 "incorporation by adoption"? 11:22  
 15 15 A. Through local ordinances and through the 11:22  
 16 16 codes. 11:22  
 17 17 Q. How were they used through the codes when 11:22  
 18 18 you heard the term "incorporation by adoption"? 11:22  
 19 19 MS. MILLER-ZIEGLER: Objection to form. 11:22  
 20 20 THE WITNESS: Just referenced in the code. 11:22  
 21 21 BY MR. NERCESSIAN: 11:22  
 22 22 Q. Do you have any understanding of what the 11:22  
 23 23 term "incorporation by adoption," as used in the 11:22  
 24 24 codes, means? 11:22  
 25 25 MR. FEE: Objection to form. 11:23  
 Page 49

1 THE WITNESS: Just referenced in the code 11:23  
 2 that's adopted by California. That's all. 11:23  
 3 BY MR. NERCESSIAN: 11:23  
 4 Q. In what context does the code use it? 11:23  
 5 A. I don't know. 11:23  
 6 Q. Are you familiar with the term 11:23  
 7 "incorporation by reference"? 11:23  
 8 A. Yes. 11:23  
 9 Q. And what's your understanding of that term? 11:23  
 10 A. Referenced in the code. 11:23  
 11 Q. So do you understand that "incorporation by 11:23  
 12 adoption" and "incorporation by reference" have the 11:23  
 13 same meaning? 11:23  
 14 MS. MILLER-ZIEGLER: Objection. Leading. 11:23  
 15 THE WITNESS: I don't know. 11:23  
 16 BY MR. NERCESSIAN: 11:24  
 17 Q. Do you understand -- do you have any 11:24  
 18 understanding of how the meaning of "incorporation by 11:24  
 19 reference" may differ from "incorporation by 11:24  
 20 adoption"? 11:24  
 21 MS. MILLER-ZIEGLER: Objection. This calls 11:24  
 22 for a legal conclusion. It's also outside the scope 11:24  
 23 of the subpoena. 11:24  
 24 THE WITNESS: Yeah. I don't have an answer 11:24  
 25 for you. I don't know. 11:24  
 Page 50

1 BY MR. NERCESSIAN: 11:24  
 2 Q. But your understanding is that incorporation 11:24  
 3 by reference has been used in the codes in -- strike 11:24  
 4 that. 11:24  
 5 Is it your understanding that incorporation 11:24  
 6 by reference applies when California law references 11:24  
 7 reference standards such as the National Electrical 11:24  
 8 Code? 11:25  
 9 MR. FEE: Objection to form. 11:25  
 10 MS. MILLER-ZIEGLER: Objection. Calls for a 11:25  
 11 legal conclusion. 11:25  
 12 THE WITNESS: Yeah. I don't know. 11:25  
 13 BY MR. NERCESSIAN: 11:25  
 14 Q. You said that the State of California makes 11:25  
 15 California build the -- strike that. 11:25  
 16 You testified earlier that the Building 11:25  
 17 Standards Commission makes the California Building 11:25  
 18 Standards Code available to the public by referring 11:25  
 19 the public to the publisher; is that correct? Do you 11:25  
 20 recall that testimony? 11:25  
 21 A. Yes. 11:25  
 22 MR. FEE: Objection. Form. 11:25  
 23 BY MR. NERCESSIAN: 11:25  
 24 Q. Is the same true for the California 11:25  
 25 Electrical Code? 11:25  
 Page 51

1 MR. FEE: Objection to form. 11:25  
 2 THE WITNESS: Yes. 11:25  
 3 BY MR. NERCESSIAN: 11:25  
 4 Q. Does the State make, to your knowledge -- 11:25  
 5 strike that. 11:25  
 6 To your knowledge, does the State of 11:25  
 7 California make the text of the California Electrical 11:25  
 8 Code available to the public in any way other than by 11:26  
 9 referring it to the publisher? 11:26  
 10 MS. MILLER-ZIEGLER: Object to form. 11:26  
 11 MR. YEN: Again, you keep using the "State 11:26  
 12 of California," so you're saying the entire State of 11:26  
 13 California, not just the commission; right? I just 11:26  
 14 want to be clear when you -- 11:26  
 15 MR. NERCESSIAN: I'm asking to her 11:26  
 16 knowledge. 11:26  
 17 MR. YEN: Okay. For the entire state? 11:26  
 18 MR. NERCESSIAN: For the entire state. 11:26  
 19 MR. YEN: Okay. 11:26  
 20 THE WITNESS: The Building Standards 11:26  
 21 Commission makes available on its website a link to 11:26  
 22 the model code. The State of California, there's a 11:26  
 23 reference in building standards law that says local 11:26  
 24 jurisdictions need to make available the building 11:26  
 25 codes, all of the building codes publicly at their 11:26  
 Page 52

1 office as well, a printed version if you will. 11:26  
 2 BY MR. NERCESSIAN: 11:26  
 3 Q. And who is the publisher in the case of the 11:26  
 4 California Electrical Code? 11:27  
 5 A. The 2016 edition, the publisher was BNi, and 11:27  
 6 for the 2019 edition, the publisher was NFPA. 11:27  
 7 Q. With respect to the 2016 edition, was -- 11:27  
 8 strike that. 11:27  
 9 Did the NFPA serve any role with respect to 11:27  
 10 the 2016 edition of the California Electrical Code? 11:27  
 11 MR. FEE: Objection. Form. 11:27  
 12 MS. MILLER-ZIEGLER: Objection. It's vague. 11:27  
 13 THE WITNESS: I don't know. 11:27  
 14 BY MR. NERCESSIAN: 11:27  
 15 Q. What is BNi? 11:27  
 16 A. I don't know the full name. I know them as 11:27  
 17 BNi, is the publisher for the 2016 electrical code. 11:27  
 18 Q. Do you know anything about the entity BNi if 11:28  
 19 not the full name? 11:28  
 20 A. No, I don't. 11:28  
 21 Q. You understand that they publish the 2016 11:28  
 22 California Electrical Code? 11:28  
 23 A. Yes. 11:28  
 24 Q. Did anybody else, any other entity publish 11:28  
 25 the 2016 electrical code, California Electrical Code? 11:28  
 Page 53

1 A. Not that I -- I don't know. 11:28  
 2 Q. To your knowledge, there is no other 11:28  
 3 publisher of the California Electrical Code, the 2016 11:28  
 4 edition, other than BNi? 11:28  
 5 MS. MILLER-ZIEGLER: Objection. That 11:28  
 6 misstates her testimony. 11:28  
 7 THE WITNESS: I don't know. 11:28  
 8 BY MR. NERCESSIAN:  
 9 Q. Okay. So you're not aware of any other 11:28  
 10 publisher of the 2016 California Electrical Code 11:28  
 11 other than BNi? 11:28  
 12 A. Correct. 11:29  
 13 Q. Do you know how BNi makes the 2016 11:29  
 14 electrical code available to the public? 11:29  
 15 A. Via the website or by purchasing. 11:29  
 16 Q. When you say it makes it available via the 11:29  
 17 website, what website is that? 11:29  
 18 A. The one I'm aware of is the California 11:29  
 19 Building Standards Commission's link on their website 11:29  
 20 to their website. 11:29  
 21 Q. And for the 2016 edition that we're 11:29  
 22 discussing, that links to a BNi website? 11:29  
 23 A. I don't know. 11:29  
 24 Q. Do you know of any restrictions that appear 11:29  
 25 on the website access through the link for the 2016 11:30  
 Page 54

1 California Electrical Code? 11:30  
 2 MR. FEE: Objection to form. 11:30  
 3 THE WITNESS: Can you repeat the question? 11:30  
 4 BY MR. NERCESSIAN: 11:30  
 5 Q. Are you aware of any restrictions on the 11:30  
 6 website accessible through the link for the 2016 11:30  
 7 electrical code as it appears on the BSC website? 11:30  
 8 MR. FEE: Objection to form. 11:30  
 9 THE WITNESS: No. 11:30  
 10 BY MR. NERCESSIAN: 11:30  
 11 Q. Is it possible that there are restrictions 11:30  
 12 on the website access through the link that appears 11:30  
 13 on the BSC website for the 2016 electrical code? 11:30  
 14 MR. YEN: Objection. Calls for speculation. 11:30  
 15 MS. MILLER-ZIEGLER: Objection. Lacks 11:30  
 16 foundation as well. 11:30  
 17 BY MR. NERCESSIAN: 11:31  
 18 Q. Do you know whether the public has full 11:31  
 19 access to the text of the 2016 California Electrical 11:31  
 20 Code without payment? 11:31  
 21 MR. FEE: Objection to form. 11:31  
 22 MS. MILLER-ZIEGLER: Objection. Vague. 11:31  
 23 THE WITNESS: I'm sorry. Repeat the 11:31  
 24 question again. 11:31  
 25 BY MR. NERCESSIAN: 11:31  
 Page 55

1 Q. Do you know whether the public has full 11:31  
 2 access to the text of the 2016 California Electrical 11:31  
 3 Code without payment? 11:31  
 4 MR. FEE: Objection to form. 11:31  
 5 MS. MILLER-ZIEGLER: Objection. Vague. 11:31  
 6 BY MR. NERCESSIAN: 11:31  
 7 Q. I can rephrase. Do you know whether BNi 11:31  
 8 provides the public with full access to the text of 11:31  
 9 the 2016 California Electrical Code without payment? 11:32  
 10 MR. FEE: Objection to form. 11:32  
 11 MS. MILLER-ZIEGLER: Objection. Vague. 11:32  
 12 THE WITNESS: I don't know that. 11:32  
 13 BY MR. NERCESSIAN: 11:32  
 14 Q. You don't know one way or the other? 11:32  
 15 A. Huh-uh. 11:32  
 16 MR. YEN: So just when you're answering 11:32  
 17 questions, verbal, not -- 11:32  
 18 THE WITNESS: Okay. Sorry. 11:32  
 19 MR. YEN: -- not just nodding the head. 11:32  
 20 THE WITNESS: Sorry. 11:32  
 21 BY MR. NERCESSIAN: 11:32  
 22 Q. All right. So when I asked, "You don't know 11:32  
 23 one way or another?" your answer was confirming that 11:32  
 24 you don't know one way or another; correct? 11:32  
 25 A. I don't know what BNi offers. 11:32  
 Page 56

1 Q. Does anybody in your office know what BNi 11:32  
 2 offers? 11:32  
 3 MR. FEE: Objection to form, calls for 11:32  
 4 speculation. 11:32  
 5 THE WITNESS: I don't know that. I wouldn't 11:32  
 6 know that. 11:32  
 7 BY MR. NERCESSIAN: 11:32  
 8 Q. Do you know whether BNi is a commercial for 11:33  
 9 profit publisher? 11:33  
 10 MR. FEE: Objection to form. 11:33  
 11 THE WITNESS: I don't know that. 11:33  
 12 BY MR. NERCESSIAN: 11:33  
 13 Q. Do you know one way or another? 11:33  
 14 MR. FEE: Same objection. 11:33  
 15 MS. MILLER-ZIEGLER: Object to form. 11:33  
 16 THE WITNESS: I'll change my answer to no. 11:33  
 17 BY MR. NERCESSIAN: 11:33  
 18 Q. So you don't know whether BNi is a 11:33  
 19 commercial for profit publisher? 11:33  
 20 A. I don't know that. 11:33  
 21 Q. We can mark this next in order. 11:34  
 22 (Exhibit 4 marked) 11:34  
 23 BY MR. NERCESSIAN: 11:34  
 24 Q. Ms. Marvelli, I've handed you a document 11:34  
 25 that's been marked for identification as Exhibit 4. 11:34  
 Page 57

1 Do you recognize this document? 11:34  
 2 A. I've not seen this print before, but it 11:34  
 3 appears to be the California Electrical Code, the '19 11:35  
 4 edition. 11:35  
 5 Q. And the URL for this link has the domain 11:35  
 6 nfpa.org; correct? 11:35  
 7 A. Yes. 11:35  
 8 Q. Is that NFPA the same as the named 11:35  
 9 plaintiffs in this lawsuit, the named plaintiff? 11:35  
 10 MR. FEE: Object to form. 11:35  
 11 MR. YEN: Hold on a second. 11:35  
 12 If you need clarification, you can ask him 11:35  
 13 for clarification. 11:35  
 14 THE WITNESS: Okay. Sorry. Yeah. Yeah, I 11:35  
 15 guess I need clarification. 11:35  
 16 BY MR. NERCESSIAN: 11:35  
 17 Q. Do you know what the domain nfpa.org -- who 11:35  
 18 owns it, who runs it? 11:35  
 19 MR. FEE: Objection to form. 11:35  
 20 THE WITNESS: NFPA, so -- 11:35  
 21 MR. YEN: Objection. Calls for speculation. 11:36  
 22 THE WITNESS: Yeah, it does, yeah. 11:36  
 23 BY MR. NERCESSIAN: 11:36  
 24 Q. Do you have any experience with accessing 11:36  
 25 any web pages at nfpa.org? 11:36

Page 58

1 other? 11:37  
 2 A. No, I'm not aware. I'm not aware. I don't 11:37  
 3 know. 11:37  
 4 Q. Have you ever attempted to print the 11:37  
 5 California Electrical Code from the NFPA viewer? 11:37  
 6 A. I have not attempted to print the '19 11:37  
 7 electrical code from the viewer. 11:37  
 8 Q. Are you aware whether anyone can copy text 11:37  
 9 from the NFPA viewer for the 2019 California 11:37  
 10 Electrical Code? 11:37  
 11 MR. FEE: Objection to form. 11:37  
 12 THE WITNESS: I don't know. 11:37  
 13 BY MR. NERCESSIAN: 11:37  
 14 Q. Do you know whether someone can search the 11:38  
 15 text of the 2019 California Electrical Code on the 11:38  
 16 NFPA viewer? 11:38  
 17 MR. FEE: Objection to form. 11:38  
 18 THE WITNESS: I don't know actually. I 11:38  
 19 don't know. 11:38  
 20 BY MR. NERCESSIAN: 11:38  
 21 Q. And the BSC website links to a version of 11:38  
 22 the California Electrical Code for the year 2019 on 11:38  
 23 the NFPA viewer; correct? 11:38  
 24 A. Yes. 11:38  
 25 Q. It links to this, the website reflected in 11:38

Page 60

1 A. Yes. 11:36  
 2 Q. Have you accessed the 2019 California 11:36  
 3 Electrical Code through nfpa.org? 11:36  
 4 A. Yes. 11:36  
 5 Q. Do you have any familiarity with the NFPA 11:36  
 6 viewer that the NFPA supplies for viewing the 2019 11:36  
 7 electrical code? 11:36  
 8 MS. MILLER-ZIEGLER: Objection to form. 11:36  
 9 THE WITNESS: I have familiarity, yes. 11:36  
 10 BY MR. NERCESSIAN: 11:36  
 11 Q. In light of that experience, are the 11:36  
 12 screenshots you see reflected in this exhibit 11:36  
 13 familiar to you? 11:36  
 14 MR. FEE: Objection to form. 11:36  
 15 THE WITNESS: No. 11:36  
 16 BY MR. NERCESSIAN: 11:36  
 17 Q. Have you yourself accessed the 2019 11:36  
 18 California Electrical Code on the NFPA viewer? 11:37  
 19 A. Yes. 11:37  
 20 Q. Are you aware whether you can print the code 11:37  
 21 from the NFPA viewer? 11:37  
 22 MR. FEE: Objection to form. 11:37  
 23 THE WITNESS: I'm not aware, no. 11:37  
 24 BY MR. NERCESSIAN: 11:37  
 25 Q. Can you? Are you aware one way or the 11:37

Page 59

1 this document; correct? 11:38  
 2 MS. MILLER-ZIEGLER: Objection. Lack of 11:38  
 3 foundation. 11:38  
 4 MR. FEE: Objection to form. Mischaracterizes 11:38  
 5 her testimony. 11:38  
 6 THE WITNESS: I don't know if it links 11:38  
 7 directly to what I'm looking at today. 11:38  
 8 BY MR. NERCESSIAN: 11:38  
 9 Q. Do you have any reason to believe it doesn't 11:38  
 10 link to this web page in the NFPA viewer reflected 11:38  
 11 here? 11:38  
 12 MS. MILLER-ZIEGLER: Objection. Lack of 11:38  
 13 foundation. 11:39  
 14 THE WITNESS: I don't have a way to confirm 11:39  
 15 that. 11:39  
 16 BY MR. NERCESSIAN: 11:39  
 17 Q. Have you ever tried copying text from the 11:39  
 18 California Electrical Code on the NFPA viewer? 11:39  
 19 A. No. 11:39  
 20 Q. I'd like to refer you to the second page, 11:39  
 21 and here on the second page, there's language stating 11:39  
 22 that "Portions of this publication are reproduced 11:39  
 23 with permission from the National Electrical Code." 11:39  
 24 Do you see that here? 11:39  
 25 A. Yes. 11:39

Page 61



1 Q. And this also identifies that no portions of 11:39  
 2 NEC material may be reproduced except with permission 11:40  
 3 of the National Fire Protection Association." Do you 11:40  
 4 see that text? 11:40  
 5 A. Yes. 11:40  
 6 Q. What portions of the publication here did 11:40  
 7 NFPA contribute? 11:40  
 8 MR. YEN: Objection. Calls for speculation. 11:40  
 9 MS. MILLER-ZIEGLER: Object to form. 11:40  
 10 MR. NERCESSIAN: I can rephrase. 11:40  
 11 BY MR. NERCESSIAN: 11:40  
 12 Q. How can a reader of the California 11:40  
 13 Electrical Code distinguish which portions of the 11:40  
 14 California Electrical Code NFPA contributed? 11:40  
 15 MR. YEN: Same objection. 11:40  
 16 THE WITNESS: So on page -- and I don't 11:40  
 17 know -- the pages aren't numbered, so on the top 11:41  
 18 right corner, it says 11 of 1034. There's a legend 11:41  
 19 that tells the reader how to distinguish between 11:41  
 20 model code and California amendments. 11:41  
 21 BY MR. NERCESSIAN: 11:41  
 22 Q. And that legend indicates that if in the 11:41  
 23 margin there is this "CA" notation vertically, that 11:41  
 24 indicates that a California amendment has been made 11:41  
 25 to the model code; correct? 11:41

Page 62

1 A. Yes. 11:41  
 2 MR. FEE: I'm going to object to the use of 11:41  
 3 this exhibit in its entirety. Have you excerpted 11:41  
 4 pages of this? 11:41  
 5 MR. NERCESSIAN: Yes. These are screenshots 11:41  
 6 of what's available in the NFPA viewer. 11:41  
 7 MR. FEE: Selected by you? 11:41  
 8 MR. NERCESSIAN: Selected by me, yes. 11:41  
 9 MR. FEE: Okay. I object to that. 11:41  
 10 MS. MILLER-ZIEGLER: Objection as 11:42  
 11 incomplete. 11:42  
 12 BY MR. NERCESSIAN: 11:42  
 13 Q. All right. Does the Building Standards 11:42  
 14 Commission make any of these California amendments 11:42  
 15 available to the public separately from the 11:42  
 16 publication of the California Electrical Code? 11:42  
 17 MS. MILLER-ZIEGLER: Objection. Form. 11:42  
 18 THE WITNESS: Yes. The Final Statement of 11:42  
 19 Reasons may contain those amendments. 11:42  
 20 BY MR. NERCESSIAN: 11:42  
 21 Q. After the rulemaking process is over, does, 11:42  
 22 to your knowledge, the State of California publish 11:42  
 23 any California amendments separately? 11:42  
 24 A. The Building Standards Commission makes 11:43  
 25 available the Final Statement of Reasons on its web 11:43

Page 63

1 page which the public can access. 11:43  
 2 Q. I'd like to refer you -- call your attention 11:43  
 3 to this next page as well. It's noted as page 49 of 11:43  
 4 1034. Have you -- at the top of the -- strike that. 11:43  
 5 At the top of the page, it reads "Chapter 1 11:44  
 6 California Matrix Adoption Tables." Do you see that? 11:44  
 7 A. Yes. 11:44  
 8 Q. What is a Matrix Adoption Table? 11:44  
 9 A. It's a guide for the code reader to see 11:44  
 10 which State agencies amend or adopt an entire article 11:44  
 11 of the electrical code or only specific sections from 11:44  
 12 the articles. 11:44  
 13 Q. And what information do these tables reflect 11:44  
 14 that allows a reader to distinguish whether a code is 11:44  
 15 accepted as amended or adopted in its entirety? 11:44  
 16 MR. FEE: Objection. Form. 11:44  
 17 MS. MILLER-ZIEGLER: Objection. Misstates 11:44  
 18 her testimony. 11:44  
 19 MR. FEE: Also object, you're asking these 11:44  
 20 questions without the full California Electrical Code 11:45  
 21 in front of her, so she can't answer the question in 11:45  
 22 the context of the entire document. 11:45  
 23 BY MR. NERCESSIAN: 11:45  
 24 Q. You may answer if you understand the 11:45  
 25 question. 11:45

Page 64

1 A. This table represents what was approved by 11:45  
 2 the commission for publication in this edition of the 11:45  
 3 code. 11:45  
 4 Q. So, for instance, it reflects on the top 11:45  
 5 line those portions that were adopted in their 11:45  
 6 entirety? 11:45  
 7 MS. MILLER-ZIEGLER: Objection. It's vague. 11:45  
 8 THE WITNESS: Yeah. 11:45  
 9 BY MR. NERCESSIAN: 11:45  
 10 Q. So how would code reader understand whether 11:45  
 11 portion of the reference code, reference standard was 11:45  
 12 adopted in its entirety? 11:45  
 13 MR. FEE: Object as to form. Object to the 11:45  
 14 exhibit again. 11:45  
 15 THE WITNESS: Yeah. I'm not sure I'm 11:45  
 16 understanding the question. 11:46  
 17 BY MR. NERCESSIAN: 11:46  
 18 Q. So let's look at this table that -- just for 11:46  
 19 "Article 110 - Requirements of Electrical 11:46  
 20 Installations." How would a code reader interpret 11:46  
 21 this table? 11:46  
 22 MR. FEE: Objection. 11:46  
 23 MS. MILLER-ZIEGLER: Objection. 11:46  
 24 Speculation. 11:46  
 25 THE WITNESS: I can't answer how a code 11:46

Page 65

1 reader would interpret it. 11:46  
 2 BY MR. NERCESSIAN: 11:46  
 3 Q. What information is this table intend -- 11:46  
 4 strike that. 11:46  
 5 What information does this table for Article 11:46  
 6 110 provide that may be helpful to a code reader in 11:46  
 7 interpreting the relevant portion of the California 11:47  
 8 Electrical Code? 11:47  
 9 MS. MILLER-ZIEGLER: Objection to form. 11:47  
 10 THE WITNESS: This table, for example, 11:47  
 11 represents that DSA, the acronym SS adopts the entire 11:47  
 12 Article 110. 11:47  
 13 BY MR. NERCESSIAN: 11:47  
 14 Q. And what is DSA? 11:47  
 15 A. The Division of the State Architect. And 11:47  
 16 the SS is -- represents further structural safety 11:47  
 17 program. 11:47  
 18 Q. And then we have -- two columns over, do you 11:47  
 19 see there's this column that reads "HCD"? 11:47  
 20 A. Yes. 11:47  
 21 Q. What does that acronym refer to? 11:47  
 22 A. That's Department of Housing and Community 11:47  
 23 Development. 11:47  
 24 Q. And if you go down just to the second row 11:47  
 25 within that column, there are X's here under sub 11:48  
 Page 66

1 column one and a sub column two. 11:48  
 2 A. Uh-huh. 11:48  
 3 Q. What do those X's reflect? 11:48  
 4 A. That HCD's authority for one and two is 11:48  
 5 adopt the entire article as amended and that the 11:48  
 6 amended sections are listed below. 11:48  
 7 Q. And to access those articles that are 11:48  
 8 adopted in their entirety as amended -- strike that. 11:48  
 9 How would a code reader access those 11:48  
 10 articles that had been adopted in their entirety as 11:48  
 11 amended by HCD? 11:48  
 12 MR. FEE: Objection. Calls for speculation. 11:48  
 13 MR. NERCESSIAN: I can rephrase. 11:49  
 14 BY MR. NERCESSIAN: 11:49  
 15 Q. What means of access does the Building 11:49  
 16 Standards Commission provide to a code reader seeking 11:49  
 17 to access those articles adopted in their entirety as 11:49  
 18 amended by HCD? 11:49  
 19 A. They are made available on the link to the 11:49  
 20 website, and those may or may not be in the Final 11:49  
 21 Statement of Reasons that were amended by HCD. 11:49  
 22 Q. Why may they not be present in the Final 11:49  
 23 Statement of Reasons that were amended by HCD? 11:49  
 24 A. They could have been carried forward from a 11:49  
 25 previous code cycle. 11:49  
 Page 67

1 Q. And if that was the case, how would a person 11:49  
 2 access -- strike that. 11:49  
 3 If it was the case that they were carried 11:49  
 4 forward from a previous code cycle, how would a 11:49  
 5 person seeking to access those provisions know? 11:50  
 6 A. I'm not following the question. Sorry. 11:50  
 7 Q. So earlier we established that -- strike 11:50  
 8 that. 11:50  
 9 It's possible that a State agency such as 11:50  
 10 HCD may adopt an entire article as amended into its 11:50  
 11 rules while -- strike that. 11:50  
 12 It's possible that a State agency such as 11:50  
 13 HCD may adopt an entire article as amended into its 11:50  
 14 rules; correct? 11:50  
 15 A. I'm sorry. Repeat the question. 11:50  
 16 Q. Is it possible that a State agency such as 11:50  
 17 HCD can adopt an entire article as amended into its 11:51  
 18 rules? 11:51  
 19 A. Yes. 11:51  
 20 Q. And in the case that it does that, is it 11:51  
 21 possible that that provision does not appear in their 11:51  
 22 Final Statement of Reasons? 11:51  
 23 A. It's possible. 11:51  
 24 Q. One reason it might not appear is in -- 11:51  
 25 strike that. 11:51  
 Page 68

1 One reason such a provision might not appear 11:51  
 2 in the Final Statement of Rules is if it was carried 11:51  
 3 forward from a previous cycle; correct? 11:51  
 4 A. Yes. 11:51  
 5 Q. In such a case, how would a person know 11:51  
 6 where to look to find the relevant code provision? 11:51  
 7 MR. FEE: Objection. Calls for speculation. 11:52  
 8 THE WITNESS: Yeah. I don't know. 11:52  
 9 BY MR. NERCESSIAN: 11:52  
 10 Q. All right. In such a case, does, to your 11:52  
 11 knowledge, the State of California -- strike that. 11:52  
 12 In such a case, would -- strike that. 11:53  
 13 In such a case, is it possible that the 11:53  
 14 entire code provision as amended appears in a Final 11:53  
 15 Statement of Reasons from the State agency from an 11:53  
 16 earlier cycle? 11:53  
 17 A. It's possible. 11:53  
 18 Q. Is there any way a person seeking to find 11:53  
 19 the relevant provision that was adopted in its 11:53  
 20 entirety as amended would know where to look to 11:53  
 21 access that provision? 11:53  
 22 MR. FEE: Objection to form, calls for 11:53  
 23 speculation. 11:53  
 24 THE WITNESS: Yeah. Yeah. I can't -- I 11:53  
 25 don't know how to answer that question. I don't have 11:54  
 Page 69

1 an answer for that question actually. 11:54  
 2 BY MR. NERCESSIAN: 11:54  
 3 Q. And why don't you have an answer for that 11:54  
 4 question? 11:54  
 5 A. I don't think I'm fully understanding what 11:54  
 6 you're trying to ask. I apologize. 11:54  
 7 Q. All right. I can rephrase. 11:54  
 8 A. Okay. 11:54  
 9 Q. I'm trying to ask with respect to these code 11:54  
 10 provisions that are part of the California 11:54  
 11 amendments, how can a person seeking to find them 11:54  
 12 access them? 11:54  
 13 MR. FEE: Objection. Calls for speculation. 11:54  
 14 THE WITNESS: They're made available on the 11:54  
 15 website in previous editions of the code. 11:54  
 16 BY MR. NERCESSIAN: 11:54  
 17 Q. And to access those -- strike that. 11:54  
 18 To access those previous editions, would the 11:54  
 19 person have to go through the publisher such as BNi? 11:55  
 20 MR. FEE: Objection. Calls for speculation. 11:55  
 21 THE WITNESS: I don't know. 11:55  
 22 BY MR. NERCESSIAN: 11:55  
 23 Q. And when -- you testified earlier that 11:55  
 24 they're available on the website in previous editions 11:55  
 25 of the code; correct? Do you recall that testimony? 11:55  
 Page 70

1 A. Yes. 11:55  
 2 Q. On whose website? 11:55  
 3 A. The link provided on our website. 11:55  
 4 Q. The link is provided on the BSC website? 11:55  
 5 A. Yes. 11:56  
 6 MS. MILLER-ZIEGLER: Objection. Asked and 11:56  
 7 answered. 11:56  
 8 BY MR. NERCESSIAN: 11:56  
 9 Q. Where is the code provided? 11:56  
 10 MR. FEE: Objection. Form. 11:56  
 11 THE WITNESS: I'm having -- I can't -- I 11:56  
 12 don't know -- I don't understand the question that 11:56  
 13 you're asking. 11:56  
 14 BY MR. NERCESSIAN: 11:56  
 15 Q. The link that's available on the BSC website 11:56  
 16 is to text elsewhere; correct? 11:56  
 17 A. Yes. 11:56  
 18 Q. Text on, for instance, with respect to the 11:56  
 19 2016 version of the code, to a website service by 11:56  
 20 BNi; correct? 11:57  
 21 MR. FEE: Objection. Calls for speculation. 11:57  
 22 THE WITNESS: The 2016 from our website does 11:57  
 23 reference the model code publisher. 11:57  
 24 BY MR. NERCESSIAN: 11:57  
 25 Q. Which you testified previously for 2016 was 11:57  
 Page 71

1 BNi; correct? 11:57  
 2 A. That was the publisher, yes. I don't know 11:57  
 3 the exact website link. 11:57  
 4 Q. That text is not on the BSC site; correct? 11:57  
 5 MR. FEE: Objection. Mischaracterizes her 11:57  
 6 testimony. 11:57  
 7 THE WITNESS: That text is not on our 11:57  
 8 website. It links to the publisher's website. 11:57  
 9 BY MR. NERCESSIAN: 11:57  
 10 Q. And you're not aware of what restrictions 11:57  
 11 the publisher places on access to that text? 11:57  
 12 MS. MILLER-ZIEGLER: Objection. Asked and 11:57  
 13 answered. 11:57  
 14 THE WITNESS: No. 11:57  
 15 BY MR. NERCESSIAN: 11:58  
 16 Q. Do you have to register with NFPA to see the 11:58  
 17 California Electrical Code at its site? 11:58  
 18 MS. MILLER-ZIEGLER: Objection. Calls for 11:58  
 19 speculation. 11:58  
 20 THE WITNESS: I don't know. 11:58  
 21 BY MR. NERCESSIAN: 11:58  
 22 Q. So you have no awareness whether one has to 11:58  
 23 register within NFPA to see the California Electrical 11:58  
 24 Code on their site? 11:58  
 25 A. I only am familiar with how it's accessed 11:58  
 Page 72

1 through the BSC website to the NFPA website. 11:58  
 2 Q. And that, as we established earlier, is by a 11:58  
 3 link on the BSC website? 11:58  
 4 A. Correct. 11:58  
 5 MS. MILLER-ZIEGLER: Objection. Asked and 11:58  
 6 answered. 11:58  
 7 BY MR. NERCESSIAN: 11:58  
 8 Q. Do you know whether a person needs to agree 11:58  
 9 to terms and conditions to access the California 11:58  
 10 Electrical Code on a publisher's website? 11:58  
 11 MS. MILLER-ZIEGLER: Objection. Lacks 11:58  
 12 foundation. 11:58  
 13 THE WITNESS: I don't know. 11:59  
 14 BY MR. NERCESSIAN: 11:59  
 15 Q. Do you know with -- strike that. 11:59  
 16 With respect to the 2016 code, do you know 11:59  
 17 whether BNi had to obtain permission from any other 11:59  
 18 entity to publish the California Electrical Code? 11:59  
 19 MR. FEE: Objection to form. 11:59  
 20 THE WITNESS: I don't know. 11:59  
 21 BY MR. NERCESSIAN: 11:59  
 22 Q. Do you know whether the State of California 11:59  
 23 receives any revenue from BNi with respect to its 11:59  
 24 application of the California Electrical Code? 11:59  
 25 A. The Building Standards Commission does not 11:59  
 Page 73

1 receive revenue from BNi. 11:59  
 2 Q. Do you know whether any other agency of the 11:59  
 3 State of California does? 11:59  
 4 A. I have -- I do not know, no. 11:59  
 5 Q. I'd like to refer your attention to the 12:00  
 6 page marked 7 of 1034 of this same document. That 12:00  
 7 starts with the heading "Acknowledgments." 12:00  
 8 A. 7? 12:00  
 9 Q. 7, correct. 12:00  
 10 A. Okay. 12:00  
 11 Q. And so you see in this first paragraph that 12:00  
 12 it states "The California Electrical Code was 12:00  
 13 developed through the outstanding collaborative 12:00  
 14 efforts of," a number of State agencies here? Do you 12:01  
 15 see that paragraph? 12:01  
 16 A. Yes. 12:01  
 17 Q. Going down the list, what contributions -- 12:01  
 18 strike that. 12:01  
 19 Are you aware of -- strike that. 12:01  
 20 So each of these State agencies contributed 12:01  
 21 to the development of the California Electrical Code; 12:01  
 22 correct? 12:01  
 23 MR. FEE: Objection to form. 12:01  
 24 MS. MILLER-ZIEGLER: Objection. Misstates 12:01  
 25 what the document says. 12:01

1 any contributions? 12:02  
 2 A. I do believe they amend the California 12:02  
 3 Electrical Code, yes. 12:03  
 4 Q. So you're defining -- just to I understand 12:03  
 5 the terminology you're using, you're defining 12:03  
 6 "contribution" as whether they propose an amendment? 12:03  
 7 A. A California amendment. 12:03  
 8 Q. That's understood. Did the Department of 12:03  
 9 Housing and Community Development seek to copyright 12:03  
 10 any of their contributions to the California 12:03  
 11 Electrical Code? 12:03  
 12 A. I don't know. 12:03  
 13 MR. FEE: Objection. Calls for speculation. 12:03  
 14 BY MR. NERCESSIAN: 12:03  
 15 Q. Are you aware of whether any of these 12:03  
 16 agencies -- strike that. 12:03  
 17 Are you aware of whether any of these State 12:03  
 18 agencies that made contributions to the 2019 12:03  
 19 California Electrical Code sought a copyright in 12:03  
 20 their contributions? 12:03  
 21 MS. MILLER-ZIEGLER: Objection. Calls for 12:03  
 22 speculation. 12:03  
 23 THE WITNESS: I don't know. 12:03  
 24 BY MR. NERCESSIAN: 12:03  
 25 Q. The only organization you're aware of that 12:04

1 THE WITNESS: I don't know that every State 12:01  
 2 agency contributed to the -- contributed to 12:01  
 3 amendments to the California Electrical Code that's 12:01  
 4 listed here. 12:01  
 5 BY MR. NERCESSIAN: 12:01  
 6 Q. Each of these State agencies collaborated in 12:01  
 7 the process of developing the California Electrical 12:02  
 8 Code, however, did they not? 12:02  
 9 MR. FEE: Objection. Calls for speculation. 12:02  
 10 THE WITNESS: I don't know that every one 12:02  
 11 collaborated for the electrical code. 12:02  
 12 BY MR. NERCESSIAN: 12:02  
 13 Q. And what definition of "collaborated" are 12:02  
 14 you using? 12:02  
 15 A. I know that these State agencies contributed 12:02  
 16 to amendments, but not all of them did. These are a 12:02  
 17 list of common State agencies that contribute to all 12:02  
 18 of the California Building Standards Code. 12:02  
 19 Q. All right. 12:02  
 20 A. So, for example, the Department of Public 12:02  
 21 Health, I wouldn't know unless I researched to see if 12:02  
 22 they actually specifically amended something in the 12:02  
 23 California Electrical Code. 12:02  
 24 Q. All right. Are you aware whether the 12:02  
 25 Department of Housing and Community Development made 12:02

1 has asserted a copyright in the California Electrical 12:04  
 2 Code is the -- strike that. 12:04  
 3 What organizations are you aware of that 12:04  
 4 have asserted a copyright in the 2019 California 12:04  
 5 Electrical Code? 12:04  
 6 A. The model code publisher. 12:04  
 7 Q. And who is that? 12:04  
 8 A. In the case of the '19, it's NFPA. 12:04  
 9 Q. And what about the 2016 California 12:04  
 10 Electrical Code? I can elaborate. 12:04  
 11 With respect to the 2016 California 12:04  
 12 Electrical Code, are you aware of any organizations 12:05  
 13 that have asserted a copyright in that version? 12:05  
 14 MS. MILLER-ZIEGLER: Objection. Calls for a 12:05  
 15 legal conclusion. 12:05  
 16 THE WITNESS: Yeah. I'd have to research 12:05  
 17 that. I don't know. 12:05  
 18 BY MR. NERCESSIAN: 12:05  
 19 Q. I'm asking for your awareness. 12:05  
 20 A. That would be BNi. 12:05  
 21 Q. And anybody else you're aware of? 12:05  
 22 A. It could possibly be NFPA, but that's -- 12:05  
 23 yeah. I'd have to research that. 12:05  
 24 Q. Are you aware of whether any of the State 12:05  
 25 agencies that made contributions to the 2016 12:05

<p>1 California Electrical Code have sought a copyright 12:05                  2 interest in those contributions? 12:05                  3 A. No. 12:05                  4 Q. So you have no awareness of State agencies 12:05                  5 seeking a copyright in their contributions to the 12:05                  6 2016 California Electrical Code? 12:06                  7 A. No. 12:06                  8 Q. Do you have -- strike that. 12:06                  9 Do you have any awareness of -- strike that. 12:06                  10 Did you have any involvement in the 12:06                  11 development of the 2013 version of the California 12:06                  12 Electrical Code? 12:06                  13 A. No. Can you repeat the question? I'm 12:06                  14 sorry. 12:06                  15 Q. Yes. Did you have any involvement in the 12:06                  16 development of the 2013 version of the California 12:06                  17 Electrical Code? 12:06                  18 A. Yes. 12:06                  19 Q. What was your involvement? 12:06                  20 A. When I worked as an architectural associate, 12:07                  21 like I spoke to earlier, I would have been involved 12:07                  22 in receiving documents from State agencies that 12:07                  23 possibly amend the California Electrical Code and 12:07                  24 review those documents for the public process. 12:07                  25 Q. And what sources was the 2013 version of the 12:07                  Page 78</p>	<p>1 Q. What organizations are you aware of that 12:08                  2 have asserted a copyright interest in any version of 12:08                  3 the California Electrical Code? 12:09                  4 MS. MILLER-ZIEGLER: Objection. That's 12:09                  5 vague. 12:09                  6 THE WITNESS: I think I already answered 12:09                  7 that question. 12:09                  8 BY MR. NERCESSIAN: 12:09                  9 Q. That was specific to a particular triennial 12:09                  10 version. I'm asking more broadly. So I can restate 12:09                  11 the question. 12:09                  12 A. Okay. 12:09                  13 Q. What organizations are you aware of that 12:09                  14 have asserted a copyright interest in any version of 12:09                  15 the California Electrical Code? 12:09                  16 A. That's too broad of a question. 12:09                  17 MS. MILLER-ZIEGLER: Objection. Vague. Not 12:09                  18 clear what you're talking about, the California -- 12:09                  19 MR. NERCESSIAN: I said California 12:09                  20 Electrical Code. 12:09                  21 MS. MILLER-ZIEGLER: Okay. And the 12:09                  22 California amendments -- 12:09                  23 (Discussion off the record) 12:09                  24 MS. MILLER-ZIEGLER: Just wanting to clarify 12:09                  25 what exactly it is that you're talking about that's 12:09                  Page 80</p>
<p>1 California Electrical Code based on? 12:07                  2 A. I believe it was the 2011 edition of the 12:07                  3 NEC. 12:07                  4 Q. That's the National Electrical Code? 12:07                  5 A. Yes. 12:07                  6 Q. Are you aware of any organization that has 12:07                  7 asserted a copyright interest in the 2013 version of 12:07                  8 the California Electrical Code? 12:07                  9 A. No. 12:07                  10 Q. Is it your understanding that no 12:07                  11 organization has asserted a copyright interest in the 12:08                  12 2013 version of the California Electrical Code? 12:08                  13 A. No. 12:08                  14 Q. You just have no understanding one way or 12:08                  15 another? 12:08                  16 A. Correct. 12:08                  17 Q. Are you aware of any State agencies that 12:08                  18 have asserted a copyright interest in the 2013 12:08                  19 version of the California Electrical Code? 12:08                  20 A. No. 12:08                  21 Q. Are you aware of any State agencies that 12:08                  22 have asserted a copyright interest in their 12:08                  23 contributions for any version of the California 12:08                  24 Electrical Code? 12:08                  25 A. No. 12:08                  Page 79</p>	<p>1 being copyrighted. 12:09                  2 BY MR. NERCESSIAN: 12:10                  3 Q. The question is are you aware of any 12:10                  4 organizations that have asserted a copyright interest 12:10                  5 in any version, that's any triennial version of the 12:10                  6 California Electrical Code including the California 12:10                  7 amendments? 12:10                  8 MS. MILLER-ZIEGLER: We'll keep the 12:10                  9 objection as vague. 12:10                  10 THE WITNESS: No. 12:10                  11 BY MR. NERCESSIAN: 12:10                  12 Q. Other than BNi and NFPA -- 12:10                  13 MR. YEN: Objection. Vague. 12:10                  14 MS. MILLER-ZIEGLER: We think this is an 12:10                  15 unfair question. You're being pretty vague about 12:11                  16 what you're talking about being copyrighted or not. 12:11                  17 MR. NERCESSIAN: I'm simply asking about 12:11                  18 whether Ms. Marvelli has any awareness of any 12:11                  19 organizations that have asserted an interest. 12:11                  20 MS. MILLER-ZIEGLER: In the California 12:11                  21 amendments or in the NEC? 12:11                  22 MR. NERCESSIAN: In the California 12:11                  23 Electrical Code. The objection is noted. 12:11                  24 BY MR. NERCESSIAN: 12:11                  25 Q. All right. I can move on. Before we move 12:11                  Page 81</p>

1 on from this exhibit, just a few more questions. 12:11  
 2 You heard NFPA's counsel's objection to 12:11  
 3 Exhibit Number 4 containing screenshots from the 12:12  
 4 NFPA's website. Does page one of the exhibit fairly 12:12  
 5 represent what a user would see on the screen in 12:12  
 6 reviewing the California Electrical Code on the NFPA 12:12  
 7 website? 12:12  
 8 MR. FEE: Objection. Calls for speculation. 12:12  
 9 THE WITNESS: I would say yes. 12:12  
 10 BY MR. NERCESSIAN: 12:12  
 11 Q. How many screenshots would be necessary to 12:12  
 12 reproduce the entire California Electrical Code? 12:12  
 13 A. I don't know. 12:12  
 14 Q. Are you aware whether one can reproduce the 12:12  
 15 whole California Electrical Code from the NFPA 12:12  
 16 website without printing over a thousand screenshots? 12:12  
 17 A. I don't know. 12:13  
 18 MR. YEN: Are you doing okay? 12:13  
 19 THE WITNESS: Yeah. Little while longer, 12:13  
 20 and then we'll take a break? 12:13  
 21 MR. YEN: Yeah. 12:13  
 22 MR. NERCESSIAN: Can we go off the record a 12:13  
 23 sec? 12:13  
 24 VIDEO OPERATOR: Sure. We're off the 12:13  
 12:13 25 record. It's .  
 12:13  
 25 Page 82

1 A. It's a PRA request. 12:16  
 2 Q. And had you seen this document prior to 12:16  
 3 receiving the subpoena? 12:16  
 4 A. Yes, back in 2016 when it was received at 12:16  
 5 our office. 12:16  
 6 Q. And it's a public records request of 12:16  
 7 October 28th, 2016; correct? 12:16  
 8 A. Yes. 12:16  
 9 Q. What documents does this request seek? 12:16  
 10 MR. FEE: Objection to form. 12:16  
 11 MR. YEN: Also object to calls for 12:16  
 12 speculation. 12:16  
 13 THE WITNESS: Yeah. I'd have to review the 12:16  
 14 whole document again. 12:16  
 15 BY MR. NERCESSIAN: 12:16  
 16 Q. Well, you can -- strike that. 12:16  
 17 This letter was addressed to you; correct? 12:17  
 18 A. Yes. 12:17  
 19 Q. And did you review this document in 2016? 12:17  
 20 A. Yes. 12:17  
 21 Q. What action did you or the Building 12:17  
 22 Standards Commission take in response to this 12:17  
 23 document? 12:17  
 24 MR. YEN: I would just caution you not to 12:17  
 25 reveal any attorney-client communications you had 12:17  
 Page 84

1 1 (Recess) 12:13  
 2 VIDEO OPERATOR: We're back on the record. 12:14  
 2 12:14 3 It's .  
 3 12:14  
 4 4 MR. NERCESSIAN: Can we please mark this 12:14  
 5 5 next in order? 12:14  
 6 6 (Exhibit 5 marked) 12:14  
 7 7 BY MR. NERCESSIAN: 12:14  
 8 8 Q. Please take a moment to look at the 12:15  
 9 9 document, and, Ms. Marvelli, do you recognize this 12:15  
 10 10 document? 12:15  
 11 11 A. Yes. 12:15  
 12 12 Q. What is it? 12:15  
 13 13 A. It was what was served to me a couple weeks 12:15  
 14 14 ago. 12:15  
 15 15 Q. And it's the subpoena to testify at today's 12:15  
 16 16 deposition; is that correct? 12:15  
 17 17 A. Yes. 12:15  
 18 18 Q. The document contains a number of 12:15  
 19 19 attachments, and I'd like to ask you some questions 12:15  
 20 20 about some of them. 12:15  
 21 21 A. Okay. 12:15  
 22 22 Q. So if we could go to Attachment A. Do you 12:15  
 23 23 recognize this document? 12:16  
 24 24 A. Yes. 12:16  
 25 25 Q. What is this document? 12:16  
 Page 83

1 with respect to this. 12:17  
 2 THE WITNESS: Okay. We responded to the PRA 12:17  
 3 and provided any responsive documents. 12:17  
 4 BY MR. NERCESSIAN: 12:17  
 5 Q. Did you review the documents that were 12:17  
 6 provided pursuant to this request? 12:17  
 7 A. Yes. 12:17  
 8 Q. I have a document I'd like to show you now 12:17  
 9 that I understand was part of that production. 12:18  
 10 (Exhibit 6 marked) 12:19  
 11 BY MR. NERCESSIAN: 12:19  
 12 Q. You've been passed a document marked for 12:19  
 13 identification as Exhibit 6. You can take a moment 12:19  
 14 to review this document. Have you seen this document 12:19  
 15 before? 12:19  
 16 A. I've not seen this document before. 12:19  
 17 Q. Do you see the date at the bottom of the 12:19  
 18 page that reads 12-16-2016? 12:19  
 19 A. Yes. 12:19  
 20 Q. What does the document appear to be? 12:19  
 21 A. A series of emails. 12:19  
 22 Q. Emails from who? 12:20  
 23 A. Looks like some of them are CBSC staff. 12:20  
 24 Q. Which CBSC staff? 12:20  
 25 A. So there's Pam Maeda, Mike Nearman. 12:20  
 Page 85

<p>1 Q. And before we move on, what role does Pam 12:20                  2 Maeda have at CBSC? 12:20                  3 A. At the time, in 2016, she was either an 12:20                  4 issue -- I believe she was an office technician. 12:20                  5 Q. And Michael Nearman? 12:20                  6 A. Deputy executive director. 12:20                  7 Q. Do you have any reason to believe that these 12:20                  8 documents were not produced by CBSC in response to 12:21                  9 the public records request, Public.Resource? 12:21                  10 MR. FEE: Objection. Calls for speculation. 12:21                  11 THE WITNESS: I don't know because I don't 12:21                  12 have a copy of what we responded to in our PRA. Are 12:21                  13 you stating that this is the PRA request that we sent 12:21                  14 back to them? I have no way to know that. 12:21                  15 BY MR. NERCESSIAN: 12:21                  16 Q. What information would you need to know 12:21                  17 that? 12:21                  18 A. Well, I would want to look at what we 12:21                  19 responded to the PRA from our office. That wasn't 12:21                  20 included in the documents that you provided me in the 12:21                  21 subpoena. 12:21                  22 Q. Yes. These were other -- well, strike that. 12:21                  23 The subpoena did not include the full 12:22                  24 universe of documents that -- strike that. 12:22                  25 Did the subpoena attach the full universe of 12:22</p> <p style="text-align: right;">Page 86</p>	<p>1 Q. I want to call your attention to the first 12:23                  2 sentence within the body. 12:23                  3 A. Okay. 12:23                  4 Q. That says "In our future response to 12:23                  5 Mr. Malamud, please keep this info. It may be 12:23                  6 useful." Do you see that? 12:23                  7 A. Yes. 12:23                  8 Q. Do you recall why the information reflected 12:23                  9 in this document may be useful? 12:23                  10 A. No. I haven't read this in two years, so, 12:24                  11 no, I don't recall. 12:24                  12 Q. I want to call your attention to this -- 12:24                  13 further down on the document, there's a heading that 12:24                  14 reads "Caution Regarding Official Code." Do you see 12:24                  15 that? 12:24                  16 A. Yes. 12:24                  17 Q. And that caution includes information about 12:24                  18 a Government Code section. 12:24                  19 A. Uh-huh. 12:24                  20 Q. Do you see that? 12:24                  21 A. Uh-huh. Yes. Sorry. 12:24                  22 Q. What does the relevant section of the code 12:24                  23 cited here require? 12:24                  24 MR. FEE: Objection. Calls for a legal 12:24                  25 conclusion. 12:24</p> <p style="text-align: right;">Page 88</p>
<p>1 documents that CBSC provided in response to the 12:22                  2 public records request from Public.Resource? 12:22                  3 A. No. 12:22                  4 Q. Did CBSC produce documents in response to 12:22                  5 the public records request from Public.Resource? 12:22                  6 A. Yes. 12:22                  7 Q. Did those documents include internal emails 12:22                  8 from CBSC staff? 12:22                  9 A. I don't know. 12:22                  10 Q. Did you review the documents that CBSC 12:22                  11 produced in response to this public records request? 12:22                  12 A. No. 12:22                  13 Q. I'd like to call your attention to the last 12:22                  14 page of this compilation document. 12:23                  15 MR. YEN: Exhibit 6? 12:23                  16 MR. NERCESSIAN: Exhibit 6, correct. 12:23                  17 BY MR. NERCESSIAN: 12:23                  18 Q. Do you recognize this document? 12:23                  19 A. Yes. 12:23                  20 Q. And what is this document? 12:23                  21 A. It's an email from me to Alex and Michael 12:23                  22 Nearman back in 2016. 12:23                  23 Q. And what prompted you to write this 12:23                  24 document? 12:23                  25 A. I don't recall. 12:23</p> <p style="text-align: right;">Page 87</p>	<p>1 THE WITNESS: Yeah. I would just offer what 12:24                  2 it states here. 12:24                  3 BY MR. NERCESSIAN: 12:25                  4 Q. And what is that? 12:25                  5 A. It appears to state "Government Code 12:25                  6 Section 11344 requires the" -- "OLA" is the 12:25                  7 abbreviation for the Office of Administrative Law -- 12:25                  8 "to provide for the official compilation, printing 12:25                  9 and publication of State regulations in the 12:25                  10 California Code of Regulations." 12:25                  11 Q. Now we've been discussing Title 24. 12:25                  12 A. Uh-huh. 12:25                  13 Q. And is Title 24 part of the Code of 12:25                  14 Regulations? 12:25                  15 A. It's the 24th title in the California Code 12:25                  16 of Regulations, yes. 12:25                  17 Q. Is it your understanding that the Office of 12:25                  18 Administrative Law provides a compilation of the 12:25                  19 entire California Code of Regulations including 12:25                  20 Title 24? 12:25                  21 A. The Office of Administrative Law links to 12:25                  22 our website for Title 24. 12:25                  23 Q. Does the Office of Administrative Law 12:25                  24 provide access to the other titles within the 12:26                  25 California Code of Regulations? 12:26</p> <p style="text-align: right;">Page 89</p>

1 MR. FEE: Objection to form. 12:26  
 2 THE WITNESS: I don't know. 12:26  
 3 BY MR. NERCESSIAN: 12:26  
 4 Q. Are you aware of whether Title 24 of the 12:26  
 5 California Code of Regulations is treated any 12:26  
 6 differently than other titles within the California 12:26  
 7 Code of Regulations? 12:26  
 8 MS. MILLER-ZIEGLER: Objection to form. 12:26  
 9 THE WITNESS: I just know that it points to 12:26  
 10 our website, the CBSC website. 12:26  
 11 BY MR. NERCESSIAN: 12:26  
 12 Q. Do any of the other titles of the California 12:26  
 13 Code of Regulations point to the CBSC website? 12:26  
 14 MR. YEN: Objection. Calls for speculation. 12:26  
 15 THE WITNESS: Yeah. I don't know. 12:26  
 16 BY MR. NERCESSIAN: 12:26  
 17 Q. Are you aware of any other titles that point 12:26  
 18 to the CBSC website? 12:26  
 19 A. I don't know. 12:27  
 20 Q. So you're not aware of any other titles of 12:27  
 21 the California Code of Regulations that point to the 12:27  
 22 CBSC website? 12:27  
 23 A. I don't have any knowledge of that. I don't 12:27  
 24 know. 12:27  
 25 Q. Are you aware of any issues persons seeking 12:27  
 Page 90

1 to read the code have encountered in accessing the 12:27  
 2 California Electrical Code? 12:27  
 3 MR. FEE: Objection. Calls for speculation. 12:27  
 4 MS. MILLER-ZIEGLER: Vague. 12:27  
 5 THE WITNESS: You'll have to repeat the 12:28  
 6 question. I'm sorry. 12:28  
 7 BY MR. NERCESSIAN: 12:28  
 8 Q. Okay. I can rephrase. 12:28  
 9 A. Uh-huh. 12:28  
 10 Q. Has the CBSC ever been informed of issues 12:28  
 11 persons seeking to read the California Electrical 12:28  
 12 Code have encountered in accessing the code? 12:28  
 13 MS. MILLER-ZIEGLER: Objection. Calls for 12:28  
 14 speculation. 12:28  
 15 MR. FEE: Objection to form. 12:28  
 16 THE WITNESS: We've received calls where the 12:28  
 17 code might not be online, and we notify the publisher 12:28  
 18 to put it online if there's a link that's broken. 12:28  
 19 BY MR. NERCESSIAN: 12:28  
 20 Q. And in those situations, does the CBSC have 12:29  
 21 any ability to itself fix the access issue with the 12:29  
 22 broken link? 12:29  
 23 A. No. 12:29  
 24 MR. FEE: Objection to form. 12:29  
 25 THE WITNESS: We -- sorry. We contact the 12:29  
 Page 91

1 publisher and let them know that the link is broken, 12:29  
 2 and then we have it fixed. 12:29  
 3 BY MR. NERCESSIAN: 12:29  
 4 Q. Because it's the publisher that furnishes 12:29  
 5 the text of the California Electrical Code to people 12:29  
 6 seeking to access it online; correct? 12:29  
 7 A. The link is provided through our website to 12:29  
 8 the publisher. 12:29  
 9 Q. Any other difficulties that you have been 12:29  
 10 aware of at the CBSC in gaining access to the 12:29  
 11 California Electrical Code? 12:29  
 12 MS. MILLER-ZIEGLER: Objection. 12:29  
 13 Mischaracterizes her testimony. 12:29  
 14 THE WITNESS: No. 12:29  
 15 BY MR. NERCESSIAN: 12:29  
 16 Q. In situations where -- in the cases -- 12:30  
 17 strike that. 12:30  
 18 In those cases where you've received calls 12:30  
 19 with problems accessing the code, who was it that had 12:30  
 20 the issue? 12:30  
 21 A. I don't know. I don't recall. 12:30  
 22 Q. Was it BSC staff? 12:30  
 23 A. I don't recall. 12:30  
 24 Q. Would it have been members of the public? 12:30  
 25 A. I don't recall. 12:30  
 Page 92

1 Q. So is it your testimony there -- strike 12:30  
 2 that. 12:30  
 3 So is it your testimony that -- strike that. 12:30  
 4 Like to refer you to the first page of this 12:30  
 5 compilation document. So we discussed previously 12:31  
 6 this exchange between Pam Maeda and Mike Nearman. Do 12:31  
 7 you recall that? 12:31  
 8 A. Yes. 12:31  
 9 Q. And do you see there's this first paragraph 12:31  
 10 that reads "Just received a phone call from Suren 12:31  
 11 at," and it provides a phone number, "and he tried to 12:31  
 12 view the code on the BSC website, and it came up with 12:31  
 13 the ICC page wanting him to pay for the premium 12:31  
 14 access in order to view the code"? Do you see that 12:31  
 15 paragraph? 12:32  
 16 A. Uh-huh. 12:32  
 17 Q. Here, the reference it makes to Part 2.5, do 12:32  
 18 you understand that to mean Part 2.5 of Title 24? 12:32  
 19 A. Yes. 12:32  
 20 Q. And Part 2.5 is the residential code? 12:32  
 21 A. That's the California Residential Code, yes. 12:32  
 22 Q. And who is the publisher for the California 12:32  
 23 Residential Code? 12:32  
 24 A. The International Code Council. 12:32  
 25 Q. And that's the ICC you referred to in this 12:32  
 Page 93



<p>1 sentence? 12:32</p> <p>2 A. Yes. 12:32</p> <p>3 Q. Have you been aware of any instances -- 12:32</p> <p>4 strike that. 12:32</p> <p>5 Are you aware of any instances where CBSC 12:32</p> <p>6 has received word from a member of the public that a 12:32</p> <p>7 publisher required that person to pay for premium 12:32</p> <p>8 access to view the code? 12:33</p> <p>9 MR. FEE: Objection. To the extent it 12:33</p> <p>10 purports to characterize this document, 12:33</p> <p>11 mischaracterizes it. 12:33</p> <p>12 THE WITNESS: I think it's taken out of 12:33</p> <p>13 context. This is one instance, but this isn't 12:33</p> <p>14 accurate. 12:33</p> <p>15 BY MR. NERCESSIAN: 12:33</p> <p>16 Q. Oh. You don't believe that -- strike that. 12:33</p> <p>17 When this report came in March of 2016, were 12:33</p> <p>18 you made aware of it? 12:33</p> <p>19 A. This, I don't know. I don't recall. 12:33</p> <p>20 Q. Have you ever heard of -- strike that. 12:33</p> <p>21 Has CBSC, in the past, ever received reports 12:33</p> <p>22 of people seeking to access the code and being made 12:33</p> <p>23 to pay for a premium access? 12:34</p> <p>24 MR. FEE: Objection to form. 12:34</p> <p>25 THE WITNESS: No. 12:34</p> <p style="text-align: right;">Page 94</p>	<p>1 California Residential Code from the ICC website? 12:35</p> <p>2 MR. FEE: Objection. Calls for speculation. 12:35</p> <p>3 THE WITNESS: I don't -- I can't answer the 12:35</p> <p>4 question the way you're asking it. That's the 12:35</p> <p>5 difficulty. 12:36</p> <p>6 BY MR. NERCESSIAN: 12:36</p> <p>7 Q. So what's the nature of the difficulty? 12:36</p> <p>8 Maybe I can clarify. 12:36</p> <p>9 A. Well, to view the California codes, you can 12:36</p> <p>10 access the codes via our website, which points to ICC 12:36</p> <p>11 similarly to how we just discussed the BNi or the 12:36</p> <p>12 NFPA, so that's how you can view the codes online. 12:36</p> <p>13 If you want to purchase the codes, you have other 12:36</p> <p>14 access to the codes. 12:36</p> <p>15 Q. But if you want to view the codes, do you 12:36</p> <p>16 know whether they're -- strike that. 12:36</p> <p>17 Short of purchasing the codes, do you know 12:36</p> <p>18 whether a person can receive -- strike that. 12:36</p> <p>19 Short of purchasing the codes, do you know 12:36</p> <p>20 whether a person can search the California 12:36</p> <p>21 Residential Code on the ICC website? 12:37</p> <p>22 MR. FEE: Objection. Calls for speculation. 12:37</p> <p>23 THE WITNESS: I don't know. 12:37</p> <p>24 BY MR. NERCESSIAN: 12:37</p> <p>25 Q. Have you viewed the California Residential 12:37</p> <p style="text-align: right;">Page 96</p>
<p>1 BY MR. NERCESSIAN: 12:34</p> <p>2 Q. Are you aware of anybody in -- strike that. 12:34</p> <p>3 Are you aware of any other members of your 12:34</p> <p>4 team at CBSC receiving reports from people seeking to 12:34</p> <p>5 access the code that they met a demand to pay for 12:34</p> <p>6 premium access to view the code? 12:34</p> <p>7 MR. FEE: Objection to form. 12:34</p> <p>8 THE WITNESS: I don't know. 12:34</p> <p>9 BY MR. NERCESSIAN: 12:34</p> <p>10 Q. Are you aware of whether the ICC web 12:34</p> <p>11 page requires premium access in order to view the 12:34</p> <p>12 California Residential Code? 12:35</p> <p>13 A. It does not. 12:35</p> <p>14 Q. Are you aware of whether the ICC website 12:35</p> <p>15 places any restrictions on a person's access to the 12:35</p> <p>16 California Residential Code? 12:35</p> <p>17 A. I don't know what you mean by "restriction." 12:35</p> <p>18 Q. Do you know whether a person can print the 12:35</p> <p>19 California Residential Code from the ICC website? 12:35</p> <p>20 MR. FEE: Objection. Calls for speculation. 12:35</p> <p>21 THE WITNESS: Not aware. 12:35</p> <p>22 BY MR. NERCESSIAN: 12:35</p> <p>23 Q. One way or another? 12:35</p> <p>24 A. No. 12:35</p> <p>25 Q. Do you know whether a person can search the 12:35</p> <p style="text-align: right;">Page 95</p>	<p>1 Code on the ICC website? 12:37</p> <p>2 A. Yes. 12:37</p> <p>3 Q. Have you tried to print the California 12:37</p> <p>4 Residential Code from the ICC website? 12:37</p> <p>5 A. No. 12:37</p> <p>6 Q. Do you know whether one can print the 12:37</p> <p>7 California Residential Code from the ICC website? 12:37</p> <p>8 MR. FEE: Objection. Calls for speculation. 12:37</p> <p>9 THE WITNESS: I don't know. 12:37</p> <p>10 BY MR. NERCESSIAN: 12:37</p> <p>11 Q. Have you tried to search the California 12:37</p> <p>12 Residential Code from the ICC website? 12:37</p> <p>13 A. No. 12:37</p> <p>14 Q. Do you know whether one can search the 12:37</p> <p>15 California Residential Code from the ICC website? 12:37</p> <p>16 MR. FEE: Objection. Calls for speculation. 12:37</p> <p>17 THE WITNESS: I don't know. 12:37</p> <p>18 BY MR. NERCESSIAN: 12:37</p> <p>19 Q. Have you tried to extract tests from the 12:37</p> <p>20 California Residential Code from the ICC website? 12:37</p> <p>21 A. No. 12:37</p> <p>22 Q. Do you know whether one can extract text 12:38</p> <p>23 from the California Residential Code from the ICC 12:38</p> <p>24 website? 12:38</p> <p>25 MR. FEE: Objection. Calls for speculation. 12:38</p> <p style="text-align: right;">Page 97</p>

1 THE WITNESS: I don't know. 12:38  
 2 BY MR. NERCESSIAN: 12:38  
 3 Q. Other than viewing the California 12:38  
 4 Residential Code from the ICC website, have you taken 12:38  
 5 any other actions with respect to the California 12:38  
 6 Residential Code on the ICC website? 12:38  
 7 MS. MILLER-ZIEGLER: Objection. Vague. 12:38  
 8 THE WITNESS: Yeah. I'm not sure what 12:38  
 9 you're asking. 12:38  
 10 BY MR. NERCESSIAN: 12:38  
 11 Q. Have you done anything other than view the 12:38  
 12 code -- strike that. 12:38  
 13 With respect to the California Residential 12:38  
 14 Code on the ICC website -- okay. Strike that. 12:38  
 15 A. Which one? 12:39  
 16 Q. We're just starting with a blank slate. 12:39  
 17 A. Great. 12:39  
 18 Q. All right. With respect to the California 12:39  
 19 Residential Code that appears on the ICC website, 12:39  
 20 have you done anything other than view that code? 12:39  
 21 A. No. 12:39  
 22 MS. MILLER-ZIEGLER: Objection. Vague. 12:39  
 23 BY MR. NERCESSIAN: 12:39  
 24 Q. I'd like to go back to another attachment of 12:39  
 25 Exhibit 5, and this is Attachment B, and I just have 12:39  
 Page 98

1 a few preliminary questions, and then we can go on 12:39  
 2 our lunch break. 12:40  
 3 All right. So do you recognize this 12:40  
 4 document, Attachment B? 12:40  
 5 A. Yes. 12:40  
 6 Q. And what is this document? 12:40  
 7 A. It appears to be another PRA request dated 12:40  
 8 December 9th, 2016. 12:40  
 9 Q. And do you see that the second to last 12:40  
 10 sentence of the first paragraph reads "On or around 12:40  
 11 October 27th and until on or around November 7th, the 12:40  
 12 Building Standards Commission displayed on its 12:40  
 13 website a searchable PDF file of the California 12:40  
 14 Electric Code 2016 triennial edition"? Do you see 12:41  
 15 that sentence? 12:41  
 16 A. Yes. 12:41  
 17 Q. Is that sentence accurate? 12:41  
 18 MR. FEE: Objection. Calls for speculation. 12:41  
 19 THE WITNESS: It was a long time ago, so I 12:41  
 20 don't recall the specifics. 12:41  
 21 BY MR. NERCESSIAN: 12:41  
 22 Q. Are you aware whether the Building Standards 12:41  
 23 Commission has ever displayed a searchable PDF file 12:41  
 24 of the California Electrical Code on its website? 12:41  
 25 A. Yes. 12:41  
 Page 99

1 Q. When did it do so? 12:41  
 2 A. I don't have the specific dates. 12:41  
 3 Q. What do you recall of that instance? 12:41  
 4 MR. FEE: Objection to form. 12:41  
 5 THE WITNESS: It was a -- sorry. Okay? 12:41  
 6 BY MR. NERCESSIAN: 12:41  
 7 Q. Okay. 12:41  
 8 A. It was displayed on our website, and when 12:41  
 9 staff realized that that version was displayed on our 12:41  
 10 website, we removed it and posted the appropriate 12:41  
 11 link to the California Electrical Code, the 2016 12:41  
 12 edition. 12:42  
 13 Q. And the link it was replaced with was this 12:42  
 14 nfpa.org URL; is that correct? 12:42  
 15 MS. MILLER-ZIEGLER: Objection to form. 12:42  
 16 THE WITNESS: I -- 12:42  
 17 BY MR. NERCESSIAN: 12:42  
 18 Q. You don't know one way or -- 12:42  
 19 A. I don't know. Yeah. Was a long time ago. 12:42  
 20 Q. Why did the Building Standards Commission 12:42  
 21 make the decision to place a searchable PDF file of 12:42  
 22 the California Electrical Code 2016 edition on its 12:42  
 23 website? 12:42  
 24 MS. MILLER-ZIEGLER: Objection. Calls for 12:42  
 25 speculation. 12:42  
 Page 100

1 THE WITNESS: It was a mistake by staff. 12:42  
 2 BY MR. NERCESSIAN: 12:42  
 3 Q. How did the Building Standards Commission 12:42  
 4 obtain a searchable PDF file of the California 12:42  
 5 Electrical Code? 12:43  
 6 MS. MILLER-ZIEGLER: Objection to form. 12:43  
 7 THE WITNESS: We have a contract with NFPA 12:43  
 8 and BNi, and we receive a searchable version for 12:43  
 9 staff only for the production of the next edition of 12:43  
 10 the code. 12:43  
 11 BY MR. NERCESSIAN: 12:43  
 12 Q. Do you know why the BSC does not keep the 12:43  
 13 text of the California Electrical Code on its own 12:43  
 14 website? 12:43  
 15 MR. YEN: Objection. Calls for speculation. 12:43  
 16 THE WITNESS: I don't know. 12:43  
 17 BY MR. NERCESSIAN: 12:43  
 18 Q. So you have no idea why the Building 12:43  
 19 Standards Commission does not itself keep the text of 12:43  
 20 the California Electrical Code on its website? 12:43  
 21 MS. MILLER-ZIEGLER: Objection. Form. 12:43  
 22 THE WITNESS: It's in our contract that we 12:43  
 23 are provided a link to the publisher's website to put 12:44  
 24 on our website. 12:44  
 25 BY MR. NERCESSIAN: 12:44  
 Page 101

<p>1 Q. But the BSC itself has a text searchable 12:44                  2 version in the form of a PDF file of the California 12:44                  3 Electrical Code; correct? 12:44                  4 A. Yes. 12:44                  5 Q. How does the BSC use that file? 12:44                  6 A. Internally for code development. 12:44                  7 Q. And what does that mean? 12:44                  8 A. We are able to clip copy information out if 12:44                  9 we need to make amendments to the code during the 12:44                  10 code development process. 12:44                  11 Q. And what is clip copy information? 12:44                  12 A. If there's a specific section that 12:44                  13 California wants to amend -- or not California -- I 12:44                  14 should say the Building Standards Commission, we can 12:44                  15 copy that information and make our amendments to it. 12:45                  16 Q. And just one more question, and then we can 12:45                  17 take our lunch break. 12:45                  18 A. Uh-huh. 12:45                  19 Q. You stated earlier that it's in BSC's 12:45                  20 contract that BSC are provided a link to the 12:45                  21 publisher's website. What contract does that refer 12:45                  22 to? 12:45                  23 A. That's the contract that the Building 12:45                  24 Standards Commission has with the publisher for the 12:45                  25 code development. 12:45</p> <p style="text-align: right;">Page 102</p>	<p>1 that? 01:47                  2 MR. YEN: Objection. Mischaracterizes 01:47                  3 testimony. 01:47                  4 THE WITNESS: I recall a conversation about 01:47                  5 the nine-point criteria, yes. 01:47                  6 BY MR. NERCESSIAN: 01:47                  7 Q. I think that we have come across -- and what 01:47                  8 are the criteria for? 01:47                  9 A. It's the criteria that the State agencies 01:48                  10 develop the building standards on -- they must be met 01:48                  11 in order for them -- well, I'm not articulating well. 01:48                  12 Sorry. It's in building standards law, and it must 01:48                  13 be met prior to the commission, bringing it to the 01:48                  14 commission for the commission to take action on. 01:48                  15 Q. And do each of the State agencies apply the 01:48                  16 same nine-point criteria? 01:48                  17 A. Yes. 01:48                  18 Q. I believe that we came across the nine-point 01:48                  19 criteria over the break, and I'd just like to talk 01:48                  20 through them and see if you could confirm the 01:48                  21 accuracy of the findings. Is one of the criteria 01:48                  22 whether the proposed building standards do not 01:48                  23 conflict with, overlap or duplicate other building 01:48                  24 standards? 01:48                  25 A. That sounds accurate, yes. 01:48</p> <p style="text-align: right;">Page 104</p>
<p>1 1 Q. And is there a separate contract for each 12:45                  2 edition of the California Electrical Code that the 12:45                  2 3 BSC develops? 12:45                  3 4 A. Yes. Every two years or four years, we 12:45                  4 5 enter into a new contract with the publishers. 12:45                  5 6 Q. So does that contract prohibit California or 12:45                  6 7 the BSC from providing the text of the California 12:46                  7 8 Electrical Code to the public on its website? 12:46                  8 9 MS. MILLER-ZIEGLER: Objection. Calls for a 12:46                  9 10 legal conclusion. 12:46                  10 11 THE WITNESS: That, I don't know. 12:46                  11 12 MR. YEN: Same objection. 12:46                  12 13 MR. NERCESSIAN: All right. We can call it 12:46                  13 14 lunch. 12:46                  14 15 THE WITNESS: Okay. 12:46                  15 16 VIDEO OPERATOR: Okay. We're off the 12:46                  16 12:46 17 record. It's .                  17 12:46                  18 18 (Noon recess taken) 12:46                  19 19 VIDEO OPERATOR: We're back on the record. 01:47                  20 20 It's 1:47. 01:47                  21 21 BY MR. NERCESSIAN: 01:47                  22 22 Q. So earlier in the day, we were discussing 01:47                  23 23 the nine-point criteria analysis that CBSC and State 01:47                  24 24 agencies used to determine whether to adopt the 01:47                  25 25 language of a model code provision. Do you recall 01:47</p> <p style="text-align: right;">Page 103</p>	<p>1 Q. Is another one of the nine-point criteria 01:49                  2 whether the proposed building standards are within 01:49                  3 the parameters established by enabling legislation 01:49                  4 and are not expressly within the exclusive 01:49                  5 jurisdiction of another agency? 01:49                  6 A. Yes. 01:49                  7 Q. Is another one of the criteria whether the 01:49                  8 public interest requires the adoption of the building 01:49                  9 standards? 01:49                  10 A. I'm sorry, you'd have to repeat that one. 01:49                  11 Q. Yes. 01:49                  12 A. I didn't hear it. I'm sorry. 01:49                  13 Q. Is another of the nine-point criteria 01:49                  14 whether the public interest requires the adoption of 01:49                  15 the building standards? 01:49                  16 A. It's in the best public interest, yes. 01:49                  17 Q. Is another one of the criteria whether the 01:49                  18 proposed building standards are not unreasonable, 01:49                  19 arbitrary, unfair or capricious in whole or in part? 01:49                  20 A. Yes. 01:49                  21 Q. Is another of the nine-point criteria 01:49                  22 whether the cost to the public is reasonable based on 01:50                  23 the overall benefit to be derived from the building 01:50                  24 standards? 01:50                  25 A. Yes. 01:50</p> <p style="text-align: right;">Page 105</p>

<p>1 Q. Is one of the criteria whether the proposed 01:50                  2 building standards are not unnecessarily vague or 01:50                  3 ambiguous in whole or in part? 01:50                  4 A. Yes. 01:50                  5 Q. Is another of the criteria whether the 01:50                  6 applicable national specifications, public standards 01:50                  7 and model codes have been incorporated therein as 01:50                  8 provided in this part where appropriate? 01:50                  9 A. Yes. 01:50                  10 Q. Is another of the criteria whether the 01:50                  11 format of the proposed building standards is 01:50                  12 consistent with that adopted by the commission? 01:50                  13 A. Yes. 01:50                  14 Q. Is another of the criteria whether the 01:50                  15 proposed building standards, if they promote fire and 01:50                  16 panic safety as determined by the State Fire Marshal, 01:51                  17 have the written approval of the State Fire Marshal? 01:51                  18 A. Yes. 01:51                  19 Q. Can you think of any criteria other than 01:51                  20 these that I went through that comprise the 01:51                  21 nine-point criteria we were discussing previously? 01:51                  22 A. I can't think of any others, no. 01:51                  23 Q. Do you recognize -- do any of the criteria 01:51                  24 apply to the adoption of the NEC into the CEC? 01:51                  25 MS. MILLER-ZIEGLER: Objection. Calls for a 01:51                  Page 106</p>	<p>1 A. That's kind of a broad question. 01:53                  2 Q. I can rephrase it. What was your role in 01:53                  3 negotiating this agreement? 01:53                  4 A. Reviewing the document. 01:53                  5 Q. Did you participate in the negotiations of 01:53                  6 this agreement in any other way? 01:53                  7 A. I don't know what you mean by "negotiation." 01:53                  8 I reviewed the document. 01:53                  9 Q. Did you propose edits to the document? 01:53                  10 A. Yes, some. 01:54                  11 Q. Which ones? Strike that. 01:54                  12 Which edits did you propose to the document? 01:54                  13 MR. YEN: Caution you not to reveal any 01:54                  14 communications you had with your attorney. 01:54                  15 THE WITNESS: Yeah. And, well, I can't 01:54                  16 recall because it was quite some time ago. 01:54                  17 BY MR. NERCESSIAN: 01:54                  18 Q. What is the maximum amount of this 01:54                  19 agreement? 01:54                  20 A. I don't know off the top of my head. It's a 01:54                  21 zero dollar contract as far as I know. 01:54                  22 Q. And why is it a zero dollar contract? 01:54                  23 A. It's how we enter into a contract with the 01:54                  24 publishers. 01:54                  25 Q. What does it mean that it's a zero dollar 01:54                  Page 108</p>
<p>1 legal conclusion. 01:51                  2 THE WITNESS: I don't know. 01:51                  3 BY MR. NERCESSIAN: 01:51                  4 Q. All right. So we were previously discussing 01:51                  5 contracts that the California Building Standards 01:52                  6 Commission has with various publishers; do you recall 01:52                  7 that? 01:52                  8 A. Yes. 01:52                  9 Q. Let's mark this exhibit next in order. I 01:52                  10 believe we're at 7. 01:52                  11 (Exhibit 7 marked) 01:52                  12 BY MR. NERCESSIAN: 01:52                  13 Q. You have been handed Exhibit 7. Do you 01:52                  14 recognize this document? 01:52                  15 A. Yes. 01:52                  16 Q. And what is this document? 01:52                  17 A. Appears to be a Standard Agreement between 01:52                  18 the Division of -- excuse me -- Department of General 01:53                  19 Services, California Building Standards Commission, 01:53                  20 and NFPA, National Fire Protection Association. 01:53                  21 Q. And here at the bottom of the page, there's 01:53                  22 a signature. Is that yours? 01:53                  23 A. Yes. 01:53                  24 Q. What do you recall about the negotiation of 01:53                  25 this document? 01:53                  Page 107</p>	<p>1 contract? 01:54                  2 MR. YEN: Objection. Calls for a legal 01:54                  3 conclusion. 01:54                  4 THE WITNESS: Thank you. 01:54                  5 I'm sorry, I can't answer that. I don't 01:54                  6 know. 01:54                  7 BY MR. NERCESSIAN: 01:55                  8 Q. Does the contract itself state anywhere that 01:55                  9 it's a zero dollar contract? 01:55                  10 A. I don't know. The front page does. 01:55                  11 Q. And where is that? 01:55                  12 A. On item three. 01:55                  13 Q. Like to call your attention to Section 4-A 01:55                  14 of the contract. 4-A of Exhibit A. My apologies. 01:55                  15 Do you see that section? 01:55                  16 A. Is that about the third page in? 01:55                  17 Q. Yes. 01:55                  18 A. Okay. 01:55                  19 Q. This provision reflects a license grant from 01:55                  20 NFPA to CBSC; is that correct? 01:55                  21 MR. YEN: Objection. Calls for a legal 01:56                  22 conclusion. 01:56                  23 THE WITNESS: I'd have to read the whole 01:56                  24 thing. 01:56                  25 BY MR. NERCESSIAN: 01:56                  Page 109</p>

1 Q. I'd like to just focus on the language that 01:56  
 2 states "NFPA hereby grants CBSC a nonexclusive, 01:56  
 3 nontransferrable sublicense to use and copy all or 01:56  
 4 any portion of the 2014 NEC, NFPA supplements and 01:56  
 5 revisions to the 2014 NEC (hereinafter referred to as 01:56  
 6 'licensed property'), solely to create and publish 01:56  
 7 the 2016 CEC." Do you see that language? 01:56  
 8 A. I see it. 01:56  
 9 Q. What do you understand that language to 01:56  
 10 allow CBSC to do? 01:56  
 11 MR. YEN: Objection. Calls for a legal 01:56  
 12 conclusion. 01:56  
 13 MS. MILLER-ZIEGLER: Objection. It's also 01:56  
 14 incomplete. You left out the rest of the sentence. 01:56  
 15 BY MR. NERCESSIAN: 01:57  
 16 Q. "Hereinafter" -- do you have any 01:57  
 17 understanding of what this language in the contract 01:57  
 18 means? 01:57  
 19 MR. YEN: Same objection. 01:57  
 20 MS. MILLER-ZIEGLER: Same objection as well. 01:57  
 21 THE WITNESS: Yeah. It was a long time ago, 01:57  
 22 so I don't recall. 01:57  
 23 BY MR. NERCESSIAN: 01:57  
 24 Q. Do you have any understanding of what CBSC 01:57  
 25 does to effectuate the commitments of this contract? 01:57  
 Page 110

1 MR. YEN: Objection. Vague. 01:57  
 2 MS. MILLER-ZIEGLER: Calls for a legal 01:57  
 3 conclusion. 01:57  
 4 THE WITNESS: Yeah. I'd have to review it. 01:57  
 5 I don't know off the top of my head. 01:57  
 6 BY MR. NERCESSIAN: 01:57  
 7 Q. Why does CBSC negotiate these contracts for 01:57  
 8 each triennial edition of the code? 01:57  
 9 MS. MILLER-ZIEGLER: Objection. Calls for a 01:57  
 10 legal conclusion. 01:57  
 11 THE WITNESS: In order to use the model code 01:57  
 12 every two years. 01:57  
 13 BY MR. NERCESSIAN: 01:58  
 14 Q. And how does CBSC use the code every two 01:58  
 15 years pursuant to a contract like this? 01:58  
 16 A. We use it per the building standards law to 01:58  
 17 adopt -- for the State agencies to review and adopt 01:58  
 18 the most recent model code on a triennial basis. 01:58  
 19 Q. What is your understanding of what NFPA 01:58  
 20 receives in return to allowing CBSC to use the model 01:58  
 21 code to create a triennial version of its code? 01:58  
 22 MR. YEN: Objection. Calls for a legal 01:58  
 23 conclusion. 01:58  
 24 THE WITNESS: Yeah. I don't have an answer 01:58  
 25 for you on that one. 01:59  
 Page 111

1 BY MR. NERCESSIAN: 01:59  
 2 Q. Do you have any understanding of what this 01:59  
 3 contract allows the NFPA to do? 01:59  
 4 MR. YEN: Same objection. 01:59  
 5 THE WITNESS: It's just a broad 01:59  
 6 understanding that we are allowed to utilize the most 01:59  
 7 recent edition of the model code to level the next 01:59  
 8 edition of the California codes. 01:59  
 9 BY MR. NERCESSIAN: 01:59  
 10 Q. And do you have any understanding of what 01:59  
 11 the contract allows the NFPA to do with respect to 01:59  
 12 the 2016 California Electrical Code? 01:59  
 13 MR. YEN: Objection. Calls for a legal 01:59  
 14 conclusion. 01:59  
 15 THE WITNESS: Yeah. I'm not sure I follow 01:59  
 16 your question. 01:59  
 17 BY MR. NERCESSIAN: 02:00  
 18 Q. So you have no understanding of what the 02:00  
 19 contract allows the NFPA to do concerning the 2016 02:00  
 20 California Electrical Code? 02:00  
 21 MS. MILLER-ZIEGLER: Objection. That 02:00  
 22 mischaracterizes her testimony. 02:00  
 23 MR. YEN: Same objection and calls for a 02:00  
 24 legal conclusion. 02:00  
 25 THE WITNESS: Yeah. I don't know. 02:00  
 Page 112

1 BY MR. NERCESSIAN: 02:00  
 2 Q. Here on Section 5, paragraph two, I want to 02:00  
 3 call your attention to this sentence that reads 02:00  
 4 "Special supplements for minor or inconsequential 02:00  
 5 errors and/or changes shall be posted to the NFPA 02:00  
 6 website and shall be provided to CBSC for posting on 02:00  
 7 CBSC's website in a read-only format." Do you see 02:00  
 8 that language? 02:00  
 9 A. I actually didn't follow where you're 02:00  
 10 pointing to. 02:00  
 11 Q. Section 5-A-2. And I can read the language 02:00  
 12 again if it will help. 02:01  
 13 A. I see the language, yes. 02:01  
 14 Q. To your knowledge, has the NFPA ever 02:01  
 15 provided to CBSC a special supplement for minor or 02:01  
 16 inconsequential errors? 02:01  
 17 A. I don't recall. 02:01  
 18 Q. To your knowledge, has CBSC ever posted in 02:01  
 19 read-only format on its website a special supplement 02:01  
 20 for minor or inconsequential errors? 02:01  
 21 A. Yes. 02:01  
 22 Q. Under what circumstances? 02:01  
 23 A. There are what's called an errata so if 02:02  
 24 there are minor or inconsequential changes to the 02:02  
 25 code that are nonregulatory, there are supplement 02:02  
 Page 113

1 pages -- I'm sorry -- there are errata pages 02:02  
 2 provided, and those help the code user know that this 02:02  
 3 is a minor error in the code, and it's published on a 02:02  
 4 different piece of paper, a color buff paper, and 02:02  
 5 that tells the code user there's, you know, like a 02:02  
 6 numbering error or grammatical error. 02:02  
 7 Q. What are other examples of minor or 02:02  
 8 inconsequential errors that CBSC has corrected in the 02:02  
 9 past? 02:02  
 10 MS. MILLER-ZIEGLER: Objection to form. 02:02  
 11 THE WITNESS: That it might not be a CBSC 02:02  
 12 error, it might be -- it could be a model code error, 02:02  
 13 it could be a printing error, it could be -- yeah. 02:02  
 14 BY MR. NERCESSIAN: 02:03  
 15 Q. Any other examples? 02:03  
 16 A. Not that I can think of. 02:03  
 17 Q. And these errata are posted to the CBSC 02:03  
 18 website itself? 02:03  
 19 A. I couldn't tell you. I don't know if it's 02:03  
 20 from the NFPA website or the BNi website or our 02:03  
 21 website. I don't know off the top of my head. 02:03  
 22 Q. Where on the CBSC website does CBSC provide 02:03  
 23 information about this errata? 02:03  
 24 MS. MILLER-ZIEGLER: Objection to form. 02:03  
 25 THE WITNESS: On the codes page that you 02:03  
 Page 114

1 referred to. 02:03  
 2 BY MR. NERCESSIAN: 02:03  
 3 Q. The codes page that we previously 02:03  
 4 reviewed -- 02:03  
 5 A. Yes. 02:03  
 6 Q. -- in this case? I want to call your 02:03  
 7 attention to Section 6-B of this contract, and do you 02:04  
 8 see this language which states "All those portions of 02:04  
 9 the licensed property, be it chapters, sections, 02:04  
 10 provisions, tables, appendices, reference, etc., 02:04  
 11 which CBSC or any authorized agency does not adopt as 02:04  
 12 part of Title 24, shall be shown with a strike 02:04  
 13 through the language in the code. NFPA will show 02:04  
 14 non-adoptive language in legislated (strike through) 02:04  
 15 text and will note as not adopted by the State on 02:05  
 16 each page." Do you see that language? 02:05  
 17 A. Uh-huh. Yes. Sorry. 02:05  
 18 Q. Why not just omit deleted language -- 02:05  
 19 MS. MILLER-ZIEGLER: Objection to form. 02:05  
 20 BY MR. NERCESSIAN: 02:05  
 21 Q. -- from a model code? 02:05  
 22 A. That's just the agreement that we have with 02:05  
 23 NFPA. 02:05  
 24 Q. Do you understand any reason for that 02:05  
 25 agreement? 02:05  
 Page 115

1 A. No. 02:05  
 2 Q. And how does CBSC effectuate that agreement? 02:05  
 3 A. I'm not following the question. 02:05  
 4 Q. I can rephrase it. What steps does CBSC 02:06  
 5 take, when developing the California Electrical Code, 02:06  
 6 to track whether language is adopted or not? 02:06  
 7 MS. MILLER-ZIEGLER: Objection to form. 02:06  
 8 THE WITNESS: Well, we spoke to the code 02:06  
 9 adoption process earlier. So if a State agency 02:06  
 10 doesn't adopt a specific section, it's shown in 02:06  
 11 strikeout, and that information is forwarded to the 02:06  
 12 publisher, and then the publisher publishes it based 02:06  
 13 on the agreement that we have with them in the 02:06  
 14 contract. 02:06  
 15 BY MR. NERCESSIAN: 02:06  
 16 Q. When a State agency is considering whether 02:06  
 17 to adopt a specific section of the model code, does 02:06  
 18 it always start with the model code itself? 02:06  
 19 MR. YEN: Objection. Calls for speculation. 02:07  
 20 THE WITNESS: I can't -- I don't have an 02:07  
 21 answer for you on that one. 02:07  
 22 BY MR. NERCESSIAN: 02:07  
 23 Q. I want to call your attention to Section 6-G 02:07  
 24 at the bottom of the page, and I just want to 02:07  
 25 highlight this language that states "NFPA and/or 02:07  
 Page 116

1 authorized agency and licensee shall thereafter 02:07  
 2 publish and make available for sale to the State of 02:07  
 3 California." Do you see that language? 02:07  
 4 A. Yes. 02:07  
 5 Q. Is it accurate that the NFPA makes available 02:07  
 6 copies of the code for sale to the State of 02:07  
 7 California? 02:08  
 8 MS. MILLER-ZIEGLER: Objection. Form. 02:08  
 9 THE WITNESS: The Building Standards 02:08  
 10 Commission can also purchase the code, if they so 02:08  
 11 choose, as can other State agencies that need to use 02:08  
 12 the electrical code if they so choose. 02:08  
 13 BY MR. NERCESSIAN: 02:08  
 14 Q. So if a State agency needs to use the 02:08  
 15 California Electrical Code, they need to purchase the 02:08  
 16 California Electrical Code from the NFPA? 02:08  
 17 MS. MILLER-ZIEGLER: Objection to form. 02:08  
 18 THE WITNESS: It's a choice. 02:08  
 19 BY MR. NERCESSIAN: 02:08  
 20 Q. What other choices are available to a State 02:08  
 21 agency that needs to use the code? 02:08  
 22 A. It's available online through our website to 02:08  
 23 the publisher's website for free. There are local 02:08  
 24 law libraries that have copies of the code, and local 02:08  
 25 jurisdictions also make available the code for free. 02:09  
 Page 117

1 Q. Why might a State agency need to use a code 02:09  
 2 such as the California Electrical Code? 02:09  
 3 MR. YEN: Objection. Calls for speculation. 02:09  
 4 MR. NERCESSIAN: I can rephrase. 02:09  
 5 BY MR. NERCESSIAN: 02:09  
 6 Q. Are you aware of any reason why a State 02:09  
 7 agency might need to use a code such as the 02:09  
 8 California Electrical Code? 02:09  
 9 MS. MILLER-ZIEGLER: Objection. It's vague. 02:09  
 10 THE WITNESS: When I worked at the 02:09  
 11 Department of General Services, in my architectural 02:09  
 12 associate capacity, we had to use the codes to design 02:09  
 13 and construct state buildings or leased facilities, 02:09  
 14 and we would use the codes, and the Department of 02:09  
 15 General Services would purchase the codes for the 02:09  
 16 staff members to use. 02:09  
 17 BY MR. NERCESSIAN: 02:09  
 18 Q. And is it possible to design and construct 02:09  
 19 those State buildings or leased facilities without 02:09  
 20 reviewing the code? 02:10  
 21 MS. MILLER-ZIEGLER: Objection. Calls for 02:10  
 22 speculation. 02:10  
 23 THE WITNESS: Well, a licensed professional 02:10  
 24 would not do that because you have to follow the 02:10  
 25 code. It's possible not to purchase it. It's 02:10  
 Page 118

1 possible to go online and use the code. 02:10  
 2 BY MR. NERCESSIAN: 02:10  
 3 Q. But a licensed professional working in an 02:10  
 4 architectural capacity needs to consult the code 02:10  
 5 before they can design and construct a building? 02:10  
 6 MS. MILLER-ZIEGLER: Objection. Calls for 02:10  
 7 speculation. 02:10  
 8 BY MR. NERCESSIAN: 02:10  
 9 Q. Is that true? 02:10  
 10 A. I can't speak for all licensed 02:10  
 11 professionals. I can only speak for myself. 02:10  
 12 Q. In your experience as a licensed 02:10  
 13 professional, you reviewed the code in designing and 02:10  
 14 constructing the buildings you built? 02:10  
 15 A. Yes. 02:10  
 16 Q. Why did General Services purchase the code 02:10  
 17 instead of seeing it online? 02:11  
 18 MS. MILLER-ZIEGLER: Objection. Calls for 02:11  
 19 speculation. 02:11  
 20 THE WITNESS: I can't answer that. I don't 02:11  
 21 know. 02:11  
 22 BY MR. NERCESSIAN: 02:11  
 23 Q. In your past experience reviewing the code, 02:11  
 24 did you purchase a copy, or did you review it online? 02:11  
 25 MS. MILLER-ZIEGLER: Objection to form. 02:11  
 Page 119

1 THE WITNESS: I did both. 02:11  
 2 BY MR. NERCESSIAN: 02:11  
 3 Q. And when accessing it online -- strike that. 02:11  
 4 A. Can I correct my last statement? 02:12  
 5 Q. Sure. 02:12  
 6 A. I personally did not purchase the code. 02:12  
 7 Q. When you purchased the code, did you receive 02:12  
 8 any additional access privileges online? 02:12  
 9 MS. MILLER-ZIEGLER: Objection. 02:12  
 10 Mischaracterizes. 02:12  
 11 THE WITNESS: I personally didn't access the 02:12  
 12 code. I mean -- I'm sorry. 02:12  
 13 And I apologize. 02:12  
 14 MS. MILLER-ZIEGLER: Oh, no. That's all 02:12  
 15 right. 02:12  
 16 THE WITNESS: I personally didn't purchase 02:12  
 17 the code. That's what I corrected in my earlier 02:12  
 18 statement. I apologize. 02:12  
 19 BY MR. NERCESSIAN: 02:12  
 20 Q. Yes. Who did purchase the code? 02:12  
 21 A. The company that I worked for. 02:12  
 22 Q. And what was that? 02:12  
 23 A. It was Department of General Services. 02:12  
 24 Q. And with the department's purchase of the 02:12  
 25 code, were there any additional online access 02:12  
 Page 120

1 privileges that you received? 02:12  
 2 MS. MILLER-ZIEGLER: Objection. It's vague. 02:12  
 3 THE WITNESS: I'm not aware that they 02:12  
 4 purchased an online access version. I review it 02:12  
 5 online through what was available online. 02:12  
 6 BY MR. NERCESSIAN: 02:13  
 7 Q. To your knowledge, what local jurisdictions 02:13  
 8 make the California Electrical Code available for 02:13  
 9 free? 02:13  
 10 MR. YEN: Objection. Calls for speculation. 02:13  
 11 THE WITNESS: I don't know. 02:13  
 12 BY MR. NERCESSIAN: 02:13  
 13 Q. Your previous testimony stated that local 02:13  
 14 jurisdictions also make available the code for free. 02:13  
 15 Do you know of any? 02:13  
 16 A. I can't speak to any off the top of my head, 02:13  
 17 but that is part of building standards law. 02:13  
 18 Q. Can you identify one? 02:13  
 19 A. I've personally not gone to a local 02:13  
 20 jurisdiction and asked for it, so I can't verify 02:14  
 21 that. 02:14  
 22 Q. Have you ever gone to a law library that 02:14  
 23 maintains the code? 02:14  
 24 A. I have not. 02:14  
 25 Q. Are you aware, off the top of your head, of 02:14  
 Page 121

<p>1 the closest law library that would maintain a version 02:14                  2 of the code? 02:14                  3 A. I don't know. 02:14                  4 Q. When you say that local jurisdictions may 02:14                  5 make available versions of the code for free, what 02:14                  6 types of jurisdictions are you referring to? 02:14                  7 MR. YEN: Objection. Mischaracterizes 02:14                  8 previous testimony. 02:14                  9 BY MR. NERCESSIAN: 02:14                  10 Q. Do local -- I can rephrase it. 02:14                  11 Do local jurisdictions include cities? 02:14                  12 A. My reference was to -- and this is a broad 02:15                  13 statement because they're called different things in 02:15                  14 different local jurisdictions, would be a local 02:15                  15 building department, if you will, but that could be a 02:15                  16 broad statement. 02:15                  17 Q. Is that because a local building department 02:15                  18 might be for a county or a city or subdivision, and 02:15                  19 it just depends? 02:15                  20 A. That's correct. 02:15                  21 Q. Are you aware whether any of those local 02:15                  22 building departments get the code for free? 02:15                  23 A. Not aware. I don't know. 02:15                  24 Q. Don't know one way or another? 02:15                  25 A. I do not know. 02:15                  Page 122</p>	<p>1 broad of a question for me to be able to answer. 02:17                  2 BY MR. NERCESSIAN: 02:17                  3 Q. Can you name one significant effect that the 02:17                  4 code has on the state's built environment and its 02:17                  5 citizens? 02:17                  6 A. I would say fire issues. 02:17                  7 Q. Because the code addresses fire issues? 02:17                  8 A. Correct. 02:18                  9 Q. Does the code address any other safety 02:18                  10 issues? 02:18                  11 A. Yes. 02:18                  12 Q. What's another safety issue that the code 02:18                  13 addresses? 02:18                  14 A. Structural, mechanical performance, 02:18                  15 accessibility, concrete strength. 02:18                  16 Q. Anything else? 02:18                  17 A. There's probably too many for -- I mean 02:18                  18 that's all I can think of at the time. 02:18                  19 Q. What do you mean by "fire issues"? 02:18                  20 A. So fire safety issues, so egress of 02:18                  21 buildings, combustibility of products. 02:18                  22 Q. With respect to egress of buildings, does 02:19                  23 the code require that certain types of buildings be 02:19                  24 built in certain ways with respect to means of exit? 02:19                  25 MS. MILLER-ZIEGLER: Objection to form. 02:19                  Page 124</p>
<p>1 Q. Does CBSC take any steps to give those local 02:15                  2 building departments access to the code? 02:16                  3 A. I don't know what you mean by "access." We 02:16                  4 have the viewable format on our website. They can 02:16                  5 view it like anyone else. 02:16                  6 Q. By clicking through on the links to the 02:16                  7 publishers' websites? 02:16                  8 A. Correct. Uh-huh. 02:16                  9 Q. I want to call your attention to Section 02:16                  10 H-1, and this one contains the heading "Time is of 02:16                  11 the Essence" and contains the statement "Because the 02:16                  12 code may have significant effects on the safety of 02:16                  13 the state's built environment and its citizens, time 02:16                  14 is of the essence in performing the herein duties." 02:16                  15 Would you agree with that statement? 02:16                  16 MS. MILLER-ZIEGLER: Objection. Vague. 02:17                  17 THE WITNESS: Yeah. I mean I agree with it, 02:17                  18 yes. 02:17                  19 BY MR. NERCESSIAN: 02:17                  20 Q. What significant effects does the code have 02:17                  21 on the safety of the state's built environment and 02:17                  22 its citizens? 02:17                  23 MS. MILLER-ZIEGLER: Objection. Lack of 02:17                  24 foundation. 02:17                  25 THE WITNESS: I'm sorry. I think it's too 02:17                  Page 123</p>	<p>1 THE WITNESS: That's a very broad question. 02:19                  2 BY MR. NERCESSIAN: 02:19                  3 Q. Does the code contain any requirements with 02:19                  4 respect to egress of buildings? 02:19                  5 A. Yes. 02:19                  6 Q. What might be one example of such a 02:19                  7 requirement? 02:19                  8 A. The width of exit corridors. 02:19                  9 Q. Any others? 02:19                  10 A. Fire sprinkler issues, installation of fire 02:19                  11 sprinklers. 02:20                  12 Q. Are you aware of any consequences that might 02:20                  13 flow from not having an exit corridor that is as wide 02:20                  14 as the code prescribes? 02:20                  15 MS. MILLER-ZIEGLER: Objection to form. 02:20                  16 THE WITNESS: That's a broad question. 02:20                  17 Sorry. 02:20                  18 BY MR. NERCESSIAN: 02:20                  19 Q. What might happen if -- strike that. 02:20                  20 What might happen if an exit corridor is not 02:20                  21 as -- strike that. 02:20                  22 What consequences might a builder see if the 02:20                  23 width of an exit corridor is not compliant with what 02:21                  24 the code prescribes? 02:21                  25 MR. YEN: Objection. Calls for speculation. 02:21                  Page 125</p>



1 MS. MILLER-ZIEGLER: Objection. Form. 02:21  
 2 THE WITNESS: Yeah. That's too broad of a 02:21  
 3 question for me. Sorry. 02:21  
 4 BY MR. NERCESSIAN: 02:21  
 5 Q. You can still answer the question, though. 02:21  
 6 A. I don't have an answer for you, though. I 02:21  
 7 don't -- I don't know. 02:21  
 8 Q. Are you aware of what any consequences might 02:21  
 9 be if the width of an exit corridor is not compliant 02:21  
 10 with what the code prescribes? 02:21  
 11 MR. FEE: Objection. Calls for speculation. 02:21  
 12 MS. MILLER-ZIEGLER: Calls for a legal 02:21  
 13 conclusion. Objection. 02:21  
 14 THE WITNESS: All I'm familiar with is that 02:21  
 15 you have to have a certain amount of distance in a 02:21  
 16 corridor for a certain amount of occupant load. I 02:21  
 17 can't speculate on what would happen if it wasn't 02:22  
 18 there, if it wasn't available. 02:22  
 19 BY MR. NERCESSIAN: 02:22  
 20 Q. So you have no knowledge or awareness of 02:22  
 21 what might happen if a building design didn't comply? 02:22  
 22 MR. FEE: Objection. Calls for speculation 02:22  
 23 and form. 02:22  
 24 MS. MILLER-ZIEGLER: And calls for a legal 02:22  
 25 conclusion. 02:22

Page 126

1 THE WITNESS: It's a broad question that I 02:22  
 2 don't have an answer for. 02:22  
 3 BY MR. NERCESSIAN: 02:22  
 4 Q. What consequences could happen to a 02:22  
 5 contractor for failure to meet the California 02:22  
 6 Electrical Code requirements? 02:22  
 7 MS. MILLER-ZIEGLER: Objection. Calls for a 02:22  
 8 speculation and a legal conclusion. 02:22  
 9 THE WITNESS: Yeah. I don't work for the 02:22  
 10 California license bureau, so I don't know the 02:22  
 11 consequences of that. 02:23  
 12 BY MR. NERCESSIAN: 02:23  
 13 Q. You can't name one possible consequence? 02:23  
 14 A. No. 02:23  
 15 Q. Does the California Building Standards 02:23  
 16 Commission play any role in monitoring compliance 02:23  
 17 with the California Building Codes? 02:23  
 18 A. No. We are not an enforcement agency. 02:23  
 19 Q. What enforcement agencies are you aware of 02:23  
 20 that monitor compliance with the California Building 02:23  
 21 Codes? 02:23  
 22 MS. MILLER-ZIEGLER: Objection to form. 02:23  
 23 THE WITNESS: There's various State agencies 02:23  
 24 that have authority to enforce the codes, and then 02:23  
 25 there are the local jurisdictions that enforce the 02:23

Page 127

1 codes. 02:23  
 2 BY MR. NERCESSIAN: 02:23  
 3 Q. Do those agencies include, for instance, the 02:23  
 4 Department of Housing and Community Development? 02:24  
 5 A. They may have for some, but as far as I 02:24  
 6 know, they delegate that to the local jurisdictions 02:24  
 7 for enforcement of housing. 02:24  
 8 Q. And when you say "local jurisdictions," you 02:24  
 9 mean local building departments as we previously 02:24  
 10 discussed? 02:24  
 11 A. Yes, the broad definition of a local 02:24  
 12 building department, yes. 02:24  
 13 Q. Do you know whether the Division of the 02:24  
 14 State Architect plays any role in enforcing 02:24  
 15 compliance with the California Building Codes? 02:24  
 16 A. For State buildings, they do. 02:24  
 17 Q. Do you know what kind of enforcement actions 02:24  
 18 they might take? 02:24  
 19 A. I do not. 02:24  
 20 Q. Do you know whether the office of the State 02:24  
 21 Fire Marshal takes any actions to enforce compliance 02:24  
 22 with the California Building Codes? 02:25  
 23 A. I apologize. What was the last State agency 02:25  
 24 you requested? I thought that was what we were 02:25  
 25 talking about. 02:25

Page 128

1 Q. It was the Division of State Architect. 02:25  
 2 A. Oh. Yes. I'm sorry, I misspoke. The 02:25  
 3 Division of the State Architect does for school 02:25  
 4 construction and essential service buildings. 02:25  
 5 Q. So it's your testimony that the Division of 02:25  
 6 the State Architect enforces compliance with the 02:25  
 7 California Building Codes for school constructions 02:25  
 8 and essential service buildings? 02:25  
 9 A. Yes. 02:25  
 10 Q. And are you aware of what actions the 02:25  
 11 Division of the State Architect takes when enforcing 02:25  
 12 with respect to school construction and essential 02:25  
 13 service buildings? 02:25  
 14 A. No. 02:25  
 15 Q. Do you know whether the Office of the State 02:25  
 16 Fire Marshal takes any actions to enforce compliance 02:25  
 17 with the California Building Codes? 02:26  
 18 A. I don't know what they do. I don't know 02:26  
 19 what they do in terms of enforcement, but they do -- 02:26  
 20 Q. Do you know whether they enforce? 02:26  
 21 A. Yes, for State building. 02:26  
 22 Q. For State buildings? 02:26  
 23 A. Yes. 02:26  
 24 Q. Do you know whether the Office of Statewide 02:26  
 25 Health Planning and Development takes any actions to 02:26

Page 129

<p>1 enforce compliance with the California Building 02:26                  2 Codes? 02:26                  3 A. Yes. For hospital safety, yes. 02:26                  4 Q. Do you know what actions they take? 02:26                  5 A. I do not. 02:26                  6 Q. Do you know whether the California Energy 02:26                  7 Commission takes any actions to enforce compliance 02:26                  8 with the California Building Codes? 02:26                  9 A. I do not know. 02:26                  10 Q. Do you know whether the California 02:26                  11 Department of Public Health takes any actions to 02:26                  12 enforce compliance with the California Building 02:26                  13 Codes? 02:26                  14 A. I do not know that. 02:26                  15 Q. Do you know whether the California State 02:26                  16 Lands Commission takes any action to enforce with 02:26                  17 respect to California Building Codes? 02:27                  18 A. I do not know. 02:27                  19 Q. Do you know whether the Board of State and 02:27                  20 Community Corrections takes any actions to enforce 02:27                  21 compliance with California Building Codes? 02:27                  22 A. I do not. 02:27                  23 Q. How about -- the last one is the Building 02:27                  24 Standards Commission, so strike that. 02:27                  25 Want to call your attention back to 02:27</p> <p style="text-align: right;">Page 130</p>	<p>1 strike that. 02:29                  2 Do you know whether any free public access 02:29                  3 to the 2016 California Electrical Code was available 02:29                  4 as of July 1st, 2016? 02:29                  5 MR. FEE: Objection to form, calls for 02:29                  6 speculation. 02:29                  7 THE WITNESS: Yeah. I don't know. 02:29                  8 BY MR. NERCESSIAN: 02:29                  9 Q. Pass you a document I'd like marked next in 02:30                  10 order. Should be 8. 02:30                  11 (Exhibit 8 marked) 02:30                  12 BY MR. NERCESSIAN: 02:30                  13 Q. You've been passed a document marked for 02:30                  14 identification as Exhibit 8. Do you recognize this 02:30                  15 document? 02:30                  16 A. Uh-huh. Yes. 02:30                  17 Q. And would you have received this document? 02:30                  18 A. I am a member of the DGS Sacramento staff 02:30                  19 email, so it's possible that I received this, yes. 02:30                  20 Q. What is this document? 02:30                  21 A. That's an email from Alex Hunter who was our 02:30                  22 web person at the time. 02:31                  23 Q. And when is this document dated? 02:31                  24 A. 8-1-2016. 02:31                  25 Q. I want to call your attention to the first 02:31</p> <p style="text-align: right;">Page 132</p>
<p>1 Section H of Exhibit 7. 02:27                  2 A. Uh-huh. 02:27                  3 Q. Looking at sentence two now that says "The 02:27                  4 July 1st, 2016, date to publish the code is of 02:27                  5 critical importance." Do you see that language? 02:27                  6 A. Yes. 02:27                  7 Q. Why is it important that the code gets 02:27                  8 published at that date? 02:27                  9 A. The commission sets the effective date, 02:27                  10 which is 180 days beyond that date, and so the 02:28                  11 publication must occur 180 days prior to the 02:28                  12 effective date. That's part of building standards 02:28                  13 law. 02:28                  14 Q. So that's a legal mandate? 02:28                  15 A. Yes. 02:28                  16 Q. Are you aware whether that -- strike that. 02:28                  17 Do you know whether the 2016 California 02:28                  18 Electrical Code met that July 1st, 2016, publication 02:28                  19 date? 02:28                  20 A. Yes. 02:28                  21 Q. Do you know whether the California 02:28                  22 Electrical Code was available on the NFPA reading 02:28                  23 room as of that date? 02:28                  24 A. I do not know. 02:28                  25 Q. Do you know whether any free access was -- 02:28</p> <p style="text-align: right;">Page 131</p>	<p>1 sentence of this document which says "Online portions 02:31                  2 of the 2016 Building Standards Code published/printed 02:31                  3 by ICC are now linked on our code's web page." Do 02:31                  4 you see that? 02:31                  5 A. I do. 02:31                  6 Q. Are you aware whether the links were in 02:31                  7 working order at any point before August 1st, 2016? 02:31                  8 A. I don't recall. 02:31                  9 Q. And according to this email, the California 02:31                  10 Electrical Code, as of August 1st, 2016 -- strike 02:31                  11 that. 02:31                  12 Was the California Electrical Code published 02:32                  13 by the NFPA available for online access at that time? 02:32                  14 A. I don't recall. 02:32                  15 Q. According to the email, does it appear that 02:32                  16 there was online access available at that time? 02:32                  17 MR. YEN: Objection. Calls for speculation. 02:32                  18 THE WITNESS: I don't recall. 02:32                  19 BY MR. NERCESSIAN: 02:32                  20 Q. Do you have any reason to doubt the 02:32                  21 statement in this email that says "the California 02:32                  22 Electrical Code published by NFPA and the California 02:32                  23 Mechanical and Plumbing Codes published by IAPMO are 02:32                  24 not yet available for online access"? 02:32                  25 A. That would be online access from our 02:32</p> <p style="text-align: right;">Page 133</p>

1 website. I can't state whether or not the model code 02:32  
 2 developers had it on their website yet. 02:32  
 3 Q. So you read this to say just the link wasn't 02:32  
 4 up? 02:32  
 5 A. Correct. 02:32  
 6 Q. And you don't know whether the electrical 02:32  
 7 code was accessible on the NFPA website? 02:33  
 8 A. I don't know that. 02:33  
 9 Q. And what is IAPMO? 02:33  
 10 A. IAPMO. 02:33  
 11 Q. IAPMO. 02:33  
 12 A. Is the International Association of Plumbing 02:33  
 13 Mechanical Officials. It's another publisher that we 02:33  
 14 use. 02:33  
 15 Q. And what part of Title 24 does IAPMO deliver 02:33  
 16 model codes with respect to? 02:33  
 17 A. The Uniform Mechanical Code and the Uniform 02:33  
 18 Plumbing Code which are adopted by State agencies. 02:33  
 19 Q. Want to call your attention back to 02:34  
 20 Exhibit 7 and want to call your attention to Section 02:34  
 21 K-1 of the agreement. K-1, it's on page seven of 02:34  
 22 seven of Exhibit A. 02:34  
 23 A. Seven of seven. Okay. 02:34  
 24 Q. All right. Section K-1 states "NFPA shall 02:34  
 25 establish a distribution method in consultation with 02:34  
 Page 134

1 the CBSC." Do you see that language? 02:34  
 2 A. Yes. 02:35  
 3 Q. What distribution method has NFPA 02:35  
 4 established in consulting with the CBSC? 02:35  
 5 A. I don't recall. 02:35  
 6 Q. Are you aware of any distribution method? 02:35  
 7 A. In context with this item? I don't know in 02:35  
 8 what context this is referring, so -- 02:36  
 9 Q. Do you recall any discussions you have had 02:36  
 10 with NFPA regarding any distribution method for the 02:36  
 11 2016 California Electrical Code? 02:36  
 12 A. Well, it would be how it applies with the 02:36  
 13 rest of the contract statement. So, for example, one 02:36  
 14 distribution method would be linked to our website. 02:36  
 15 Q. And you're not aware of any distribution 02:36  
 16 method aside from that? 02:36  
 17 A. No, not right now, no. 02:36  
 18 Q. The next line down says "The NFPA shall 02:36  
 19 distribute a minimum of 200 complimentary copies of 02:36  
 20 the code as per list provided by CBSC on or before 02:37  
 21 July 1st, 2016." Do you see that? 02:37  
 22 A. I do. 02:37  
 23 Q. For whom are those 200 complimentary copies? 02:37  
 24 A. The depository libraries that are listed in 02:37  
 25 the contract. 02:37  
 Page 135

1 Q. So those are the depository libraries 02:37  
 2 identified as Exhibit A, Attachment A, and Exhibit A, 02:37  
 3 Attachment B, of this document? 02:37  
 4 A. Yes. 02:37  
 5 Q. Do those complimentary copies go to any 02:37  
 6 organization or person not identified on these 02:37  
 7 attachments? 02:37  
 8 A. I don't know. 02:37  
 9 Q. I see on these attachments there are some 02:37  
 10 libraries that are called Complete Depository 02:38  
 11 Libraries and other libraries called Selective 02:38  
 12 Depository Libraries. Do you see that? 02:38  
 13 A. I do. 02:38  
 14 Q. What's the difference between those 02:38  
 15 designations? 02:38  
 16 A. I don't know. 02:38  
 17 Q. Another line down in Section K, it says 02:38  
 18 "NFPA may wholesale the code to other resellers in 02:38  
 19 California." Do you see that? 02:38  
 20 A. I do see that. 02:38  
 21 Q. Do you know whether NFPA has? 02:38  
 22 A. I do not know. 02:38  
 23 Q. Do you know whether NFPA has made any 02:38  
 24 efforts to deliver the code to print disabled 02:38  
 25 individuals? 02:38  
 Page 136

1 MS. MILLER-ZIEGLER: Objection. Lacks 02:38  
 2 foundation and calls for speculation. 02:38  
 3 THE WITNESS: I don't know that. 02:38  
 4 BY MR. NERCESSIAN: 02:39  
 5 Q. Do you know whether NFPA has made any 02:39  
 6 efforts to deliver the code to mobility impaired 02:39  
 7 individuals? 02:39  
 8 MS. MILLER-ZIEGLER: Objection. Lack of 02:39  
 9 foundation. 02:39  
 10 THE WITNESS: I don't know that. 02:39  
 11 BY MR. NERCESSIAN: 02:39  
 12 Q. Do you know whether NFPA has made any 02:39  
 13 efforts to deliver the code to individuals that lack 02:39  
 14 sight? 02:39  
 15 MS. MILLER-ZIEGLER: Objection. Lack of 02:39  
 16 foundation. 02:39  
 17 THE WITNESS: I do not know that. 02:39  
 18 BY MR. NERCESSIAN: 02:39  
 19 Q. Has the CBSC taken any steps to deliver the 02:39  
 20 code to those who are print disabled? 02:39  
 21 A. We've not received a request for that, no. 02:39  
 22 Q. Has CBSC taken any steps to deliver the code 02:39  
 23 to individuals who are mobility impaired? 02:40  
 24 A. No. 02:40  
 25 Q. Has the CBSC made any effort to make 02:40  
 Page 137

1 available the code to those who lack sight? 02:40  
 2 A. We've not been requested that, no. 02:40  
 3 Q. To your knowledge, has the State of 02:40  
 4 California taken any efforts to make the code 02:40  
 5 available to those who have accessibility issues? 02:40  
 6 MS. MILLER-ZIEGLER: Objection. Lack of 02:40  
 7 foundation. 02:40  
 8 THE WITNESS: Yeah. I can't answer for the 02:40  
 9 State of California. 02:40  
 10 BY MR. NERCESSIAN: 02:40  
 11 Q. But you're not aware of any efforts that the 02:40  
 12 State has taken to make the code available to those 02:40  
 13 who do have accessibility issues? 02:40  
 14 A. I don't know. 02:40  
 15 MS. MILLER-ZIEGLER: Mischaracterizes her 02:40  
 16 testimony. 02:40  
 17 THE WITNESS: I don't know. 02:40  
 18 BY MR. NERCESSIAN: 02:40  
 19 Q. Just have a few more questions about this 02:41  
 20 document. Like to call your attention to Exhibit A, 02:41  
 21 Attachment C, and this page, you'll see, has the 02:41  
 22 heading -- the heading reads "2016 Intervening Code 02:41  
 23 Adoption Cycle Timeline." Do you see that? 02:41  
 24 A. I do. 02:41  
 25 Q. What is depicted in this chart? 02:41

Page 138

1 A. Actually, what's depicted is the 2015 02:42  
 2 Triennial Code Adoption Cycle Timeline that we make 02:42  
 3 available -- that the BSC makes available on its 02:42  
 4 website for interested parties, and it talks about 02:42  
 5 the timing, that's a rough outline of the timing of 02:42  
 6 the cycle, from pre-cycle all the way to publication 02:42  
 7 and effective date. It's pretty blurry, so I can't 02:42  
 8 tell you the details. 02:42  
 9 Q. So what occurs after the publication has 02:42  
 10 been placed of the 2016? 02:42  
 11 MS. MILLER-ZIEGLER: Objection. Vague. 02:42  
 12 THE WITNESS: What occurs? 02:42  
 13 BY MR. NERCESSIAN: 02:42  
 14 Q. It looks like -- if I'm reading this 02:42  
 15 correctly, it looks like there is a timeline leading 02:42  
 16 up to July 1st, 2016. Do you see that? 02:43  
 17 A. Uh-huh. 02:43  
 18 Q. And then there's activity afterwards leading 02:43  
 19 up through January 1st, 2017. What occurs during 02:43  
 20 that intervening period? 02:43  
 21 A. I can't read what the graphic says, and it's 02:43  
 22 not what occurs in the intervening period. It is the 02:43  
 23 wait period from the publication date to the 02:43  
 24 effective date, which is, as I can barely read, 1-1 02:43  
 25 of '17 on the far right side. 02:43

Page 139

1 Q. And that's -- 1-1-17 is the effective date 02:43  
 2 of the 2016 edition of the California Electrical 02:43  
 3 Code? 02:43  
 4 A. It's the effective date of all of the codes, 02:43  
 5 yes, that's correct. 02:43  
 6 Q. Want to call your attention to Exhibit B of 02:43  
 7 this agreement. It's almost at the end. 02:44  
 8 A. Okay. Before C? 02:44  
 9 Q. No. It's the second to last and the last 02:44  
 10 page. 02:44  
 11 A. Oh, sorry. Okay. Got it. I was going in 02:44  
 12 alphabetical order there. All right. 02:44  
 13 Q. Yeah. So I want to call your attention to 02:44  
 14 Section B-1 -- 02:44  
 15 A. Uh-huh. 02:44  
 16 Q. -- which states that "NFPA shall make the 02:44  
 17 code," and I'm excerpting language here, "available 02:44  
 18 to the State, local governmental agencies and the 02:44  
 19 general public at a price established by NFPA." Do 02:44  
 20 you see that language? 02:45  
 21 A. I see the language. 02:45  
 22 Q. Is there any statement anywhere in this 02:45  
 23 agreement that specifies what that price is? 02:45  
 24 A. I don't know without reading the whole 02:45  
 25 agreement. 02:45

Page 140

1 Q. Are you aware of the price that NFPA makes 02:45  
 2 the quote available for? 02:45  
 3 A. I am not. 02:45  
 4 Q. Do you know whether the code -- strike that. 02:45  
 5 Do you know whether the NFPA makes the code 02:45  
 6 available to the State for the same price that it 02:45  
 7 makes it available to the general public? 02:45  
 8 A. I don't know. 02:45  
 9 Q. Do you know whether the NFPA charges local 02:45  
 10 government agencies the same price as it charges to 02:45  
 11 the general public for access to the code? 02:46  
 12 A. I do not know. 02:46  
 13 MS. MILLER-ZIEGLER: I'm going to object to 02:46  
 14 that as vague. 02:46  
 15 MR. NERCESSIAN: What was that? 02:46  
 16 MS. MILLER-ZIEGLER: Just preserving 02:46  
 17 objection that that was vague. 02:46  
 18 BY MR. NERCESSIAN:  
 19 Q. Going to hand you one document. We can mark 02:46  
 20 this next in order. I believe it's 9. 02:46  
 21 (Exhibit 9 marked) 02:46  
 22 BY MR. NERCESSIAN: 02:46  
 23 Q. You've been handed a document marked for 02:46  
 24 identification as Exhibit 9. Do you recognize this 02:46  
 25 document? 02:46

Page 141

<p>1 A. No. 02:46                  2 Q. Do you know what the NCB coordination 02:47                  3 process is? 02:47                  4 A. Vaguely. 02:47                  5 Q. What do you know of the NCB coordination 02:47                  6 process? 02:47                  7 A. It's conducted by DGS prior to entering a 02:47                  8 contract for a noncompetitive bid with a outside 02:47                  9 entity. 02:47                  10 Q. And so "NCB" stands for noncompetitive bid? 02:47                  11 A. Yes. 02:47                  12 Q. Why is there a specific process for 02:47                  13 noncompetitive bids with outside entities? 02:47                  14 MR. FEE: Objection. Calls for speculation. 02:47                  15 THE WITNESS: Yeah. I don't know. 02:47                  16 BY MR. NERCESSIAN: 02:47                  17 Q. Do you know what the process entails? 02:47                  18 A. No. 02:47                  19 MR. FEE: Same objection. 02:47                  20 THE WITNESS: No. 02:47                  21 BY MR. NERCESSIAN: 02:47                  22 Q. Have you had to go through a noncompetitive 02:47                  23 bid process with respect to your work on the 2019 02:47                  24 triennial edition of the California Building 02:48                  25 Standards Codes? 02:48</p> <p style="text-align: right;">Page 142</p>	<p>1 Q. How long ago was it? 02:49                  2 A. At least a couple years. 02:49                  3 Q. Would it have been before 2018? 02:49                  4 A. I don't know. 02:49                  5 Q. And did you go through the noncompetitive 02:49                  6 bid process successfully for the 2019 cycle? 02:50                  7 A. Yes. 02:50                  8 Q. Did the California Building Standards 02:50                  9 Commission always go through a process by -- strike 02:51                  10 that. 02:51                  11 To your knowledge, did the State of 02:51                  12 California always rely on model codes in developing 02:51                  13 its building standards? 02:51                  14 MS. MILLER-ZIEGLER: Objection. Form. 02:51                  15 MR. FEE: Objection. Calls for speculation. 02:51                  16 THE WITNESS: That's a very broad question. 02:51                  17 BY MR. NERCESSIAN: 02:51                  18 Q. Is it one that you have any knowledge of? 02:51                  19 MR. FEE: Objection. Calls for speculation. 02:51                  20 THE WITNESS: Only in the recent history, 02:51                  21 we've used model codes. I couldn't go back years and 02:51                  22 years and years. 02:51                  23 BY MR. NERCESSIAN: 02:51                  24 Q. Are you aware of any time when California 02:51                  25 would separately publish California amendments from 02:51</p> <p style="text-align: right;">Page 144</p>
<p>1 A. Yes. 02:48                  2 Q. Did you fill out forms similar to this as a 02:48                  3 part of that process? 02:48                  4 A. Yes. 02:48                  5 Q. Did you fill out the same forms that you're 02:48                  6 seeing here? 02:48                  7 A. I don't know if they're the exact same 02:48                  8 forms. I don't know. 02:48                  9 Q. When going through this process in the 2019 02:48                  10 cycle, what disclosures needed to be made as part of 02:48                  11 the process? 02:48                  12 MS. MILLER-ZIEGLER: Objection. Lack of 02:48                  13 foundation. 02:48                  14 THE WITNESS: I don't recall. 02:48                  15 BY MR. NERCESSIAN: 02:48                  16 Q. What did you need to show in going through 02:48                  17 the noncompetitive bid process during the 2019 cycle? 02:49                  18 MS. MILLER-ZIEGLER: Objection. Lack of 02:49                  19 foundation. 02:49                  20 THE WITNESS: I don't recall. 02:49                  21 BY MR. NERCESSIAN: 02:49                  22 Q. Did you have to provide any information to 02:49                  23 the Department of General Services in going through 02:49                  24 the noncompetitive bid process during the 2019 cycle? 02:49                  25 A. I don't recall. It was quite awhile ago. 02:49</p> <p style="text-align: right;">Page 143</p>	<p>1 model codes? 02:51                  2 A. Yeah. It was a number of years ago. 02:51                  3 Q. Do you recall when that was? 02:51                  4 A. No. 02:51                  5 Q. Do you have any knowledge of why a switch 02:51                  6 was made to create single incorporated volumes? 02:51                  7 MR. FEE: Objection. 02:52                  8 MS. MILLER-ZIEGLER: Objection to form. 02:52                  9 THE WITNESS: No. 02:52                  10 Quick question. If we're going to go on for 02:52                  11 another 10, 15 minutes, can we take a quick break? 02:52                  12 MR. NERCESSIAN: Yeah. There's no question 02:52                  13 pending, so -- 02:52                  14 THE WITNESS: Okay. 02:52                  15 VIDEO OPERATOR: Off the record. It's 2:52. 02:52                  16 (Recess) 02:52                  17 VIDEO OPERATOR: Okay. We're back on the 03:07                  18 record. It's 3:08. 03:07                  19 BY MR. NERCESSIAN: 03:08                  20 Q. Ms. Marvelli, I'd like to return back to 03:08                  21 Exhibit 7 a moment. Who at CBSC had principal roles 03:08                  22 in approving the terms of this contract? 03:08                  23 A. Well, I signed off on it, and then also, I 03:08                  24 believe DGS Executive Office saw the contract. 03:08                  25 Q. Did anybody else have a role in reviewing 03:08</p> <p style="text-align: right;">Page 145</p>

1 the terms? 03:08	1 question. It would be just clarity. 03:11
2 MS. MILLER-ZIEGLER: Objection. Calls for 03:08	2 BY MR. NERCESSIAN: 03:11
3 speculation. 03:08	3 Q. I know. 03:11
4 THE WITNESS: The only other staff member at 03:08	4 A. Yeah. 03:11
5 CBSC was our staff services manager. 03:08	5 Q. But you can still answer it. 03:11
6 BY MR. NERCESSIAN: 03:08	6 A. I don't know the specifics. It was just 03:11
7 Q. And who was that? 03:08	7 clarity for how the contract read and certain wording 03:11
8 A. Katrina Benny. 03:09	8 of the codes and -- yeah. That's about it. 03:12
9 Q. What role did she play? 03:09	9 Q. Did you instruct Ms. Benny to make any 03:12
10 A. Drafting the information. 03:09	10 substantive changes to the contract terms? 03:12
11 Q. Drafting what information? 03:09	11 A. I don't recall. 03:12
12 A. The 2000 -- the information that you see in 03:09	12 Q. Did anyone tell you that any particular 03:12
13 the exhibit. 03:09	13 terms of the contract were important to the State? 03:12
14 Q. Did the information in this exhibit 03:09	14 A. That's -- 03:12
15 originate from CBSC? 03:09	15 MR. YEN: You can exclude communications 03:12
16 A. I don't know. It was similar to what was in 03:09	16 with lawyers -- 03:12
17 the last edition of the contract, so it wasn't 03:09	17 THE WITNESS: Okay. 03:12
18 originated. Not sure where it was originated from. 03:09	18 MR. YEN: -- in answering your question. 03:12
19 Q. Did Katrina Benny do the first draft of this 03:09	19 THE WITNESS: Yeah. So it would just be the 03:12
20 contract? 03:10	20 discussions we had with the contracts unit. 03:12
21 A. I don't recall. 03:10	21 BY MR. NERCESSIAN: 03:12
22 Q. Was this the first contract you had worked 03:10	22 Q. And what were the substance of those 03:12
23 on? 03:10	23 discussions? 03:12
24 A. Yes. 03:10	24 A. Just the contents of the contract and the 03:12
25 Q. Who at DGS played a role in approving the 03:10	25 way it's written. 03:13
Page 146	Page 148

1 terms of the contract? 03:10	1 Q. Did they call out any particular terms of 03:13
2 A. I don't have that. I don't know. 03:10	2 the contract that were important to the State? 03:13
3 Q. Did you have any conversations with anybody 03:10	3 MR. YEN: Objection. Vague. 03:13
4 at DGS regarding the terms of this contract? 03:10	4 THE WITNESS: Yeah. I don't know how to 03:13
5 MR. YEN: It's a "yes" or "no" question. 03:10	5 answer that. It's sort of a standard contract that 03:13
6 THE WITNESS: Yes. 03:10	6 is modified for a specific year. There isn't really 03:13
7 BY MR. NERCESSIAN: 03:10	7 a negotiation back and forth between BSC and the 03:13
8 Q. Who at DGS did you have conversations with 03:10	8 contracts unit on what is good or bad. It's more of 03:13
9 regarding the terms of this contract? 03:10	9 just the contents of it for this particular cycle. 03:13
10 A. It would have been reviewed by Legal as 03:10	10 BY MR. NERCESSIAN: 03:13
11 well. 03:11	11 Q. Do you recall how long the contract took to 03:13
12 Q. In addition to any other persons at DGS? 03:11	12 finalize? 03:13
13 A. The contract staff at DGS, but I don't know 03:11	13 A. I do not recall that. 03:13
14 who by name. 03:11	14 Q. Was it more than a month? 03:13
15 Q. Anybody else at DGS? 03:11	15 A. Yes, it was more than a month. 03:13
16 A. Not that I'm aware of. 03:11	16 Q. Was it more than two months? 03:13
17 Q. Did you have any discussions with Katrina 03:11	17 A. I don't recall. 03:13
18 Benny regarding the terms in this contract? 03:11	18 Q. Could it have been more than two months? 03:13
19 A. Yes. 03:11	19 MR. YEN: Objection. Calls for speculation. 03:14
20 Q. What were those conversations? 03:11	20 THE WITNESS: Yeah. 03:14
21 A. Just edits to the contract. 03:11	21 BY MR. NERCESSIAN: 03:14
22 Q. What edits did you prescribe to Ms. Benny 03:11	22 Q. You can still answer. 03:14
23 concerning the contract? 03:11	23 A. I don't recall. 03:14
24 MS. MILLER-ZIEGLER: Objection. Form. 03:11	24 Q. Could it have been more than six months? 03:14
25 THE WITNESS: Just -- that's a broad 03:11	25 MR. YEN: Objection. Calls for speculation. 03:14
Page 147	Page 149

<p>1 THE WITNESS: I honestly don't recall. 03:14                  2 BY MR. NERCESSIAN: 03:14                  3 Q. Were you aware of any flexibility in 03:14                  4 particular terms of the contract? 03:14                  5 MR. YEN: Objection. Vague. 03:14                  6 THE WITNESS: I don't know. 03:14                  7 BY MR. NERCESSIAN: 03:14                  8 Q. Does that mean you weren't aware of any 03:14                  9 flexibility that existed in the terms of the 03:15                  10 contract? 03:15                  11 MR. YEN: Objection. Vague. 03:15                  12 THE WITNESS: I don't know. I'm not aware. 03:15                  13 BY MR. NERCESSIAN: 03:15                  14 Q. And it's your testimony that you modelled 03:15                  15 this contract for the 2016 edition on past contracts? 03:15                  16 A. Yes. 03:15                  17 Q. Past contracts with NFPA? 03:15                  18 A. With other model code developers as well. 03:15                  19 Q. Like this document marked next in order. 03:15                  20 (Exhibit 10 marked) 03:16                  21 BY MR. NERCESSIAN: 03:16                  22 Q. You have been handed a document marked for 03:16                  23 identification as Exhibit 10. What is this document? 03:16                  24 A. I don't know. 03:16                  25 Q. Have you seen this document? 03:16</p> <p style="text-align: right;">Page 150</p>	<p>1 was consistent with contracts with other model code 03:18                  2 providers? 03:18                  3 MS. MILLER-ZIEGLER: Objection. That 03:18                  4 mischaracterizes her testimony. 03:18                  5 THE WITNESS: When we develop the contracts 03:18                  6 with the other model, the contracts are generally 03:18                  7 developed in the same amount of -- same timeframe 03:18                  8 because we're adopting the codes at the same cycle, 03:18                  9 so the contract with IAPMO and the contract with ICC 03:19                  10 are developed the similar time, and so they're 03:19                  11 similar in nature. When I review them, I can see 03:19                  12 that they're similar in nature. 03:19                  13 BY MR. NERCESSIAN: 03:19                  14 Q. What do you understand that this lawsuit is 03:19                  15 about? 03:19                  16 MS. MILLER-ZIEGLER: Objection. It's 03:19                  17 outside the scope of the subpoena. 03:19                  18 THE WITNESS: I wish I knew. 03:19                  19 BY MR. NERCESSIAN: 03:19                  20 Q. Well, what do you know about 03:19                  21 Public.Resource? 03:19                  22 A. They're a company that has codes online. 03:19                  23 That's all I know. 03:19                  24 Q. What do you know about Carl Malamud? 03:19                  25 A. They submitted -- he submitted a PRA request 03:19</p> <p style="text-align: right;">Page 152</p>
<p>1 A. Not prior to today, no. 03:16                  2 Q. Do you recall consulting this document or 03:16                  3 any other similar documents in developing the terms 03:16                  4 of the 2016 contract? 03:17                  5 MR. YEN: Objection. Vague. 03:17                  6 THE WITNESS: I have not seen this document 03:17                  7 before. 03:17                  8 BY MR. NERCESSIAN: 03:17                  9 Q. This document identifies an agreement 03:17                  10 between BNi, NFPA and CBSC, does it not? 03:17                  11 A. That's what the top reads, yes. 03:17                  12 Q. Want to call your attention to page 10 of 03:17                  13 the document, to the signature page. 03:17                  14 A. Uh-huh. 03:17                  15 Q. And underneath "Department of General 03:17                  16 Services Procurement Division for the California                  17 Building Standards Commission," there's a signature. 03:17                  18 Can you read the name of the individual signing? 03:18                  19 A. It says "Marnell Voss, Manager of the 03:18                  20 Contracts and Acquisitions." 03:18                  21 Q. Do you know Marnell Voss? 03:18                  22 A. No. 03:18                  23 Q. Do you know of Marnell Voss? 03:18                  24 A. No. 03:18                  25 Q. How do you know that the 2016 NFPA contract 03:18</p> <p style="text-align: right;">Page 151</p>	<p>1 through Public.Resource. 03:19                  2 Q. Have you had any communications regarding 03:19                  3 Public.Resource with anyone? 03:19                  4 A. No. Just in regards to answering the PRAs 03:20                  5 and just staff and coordinating the PRA requests. 03:20                  6 Q. No communications outside of the context of 03:20                  7 the PRA requests? 03:20                  8 A. No, not that I'm aware of, no. 03:20                  9 Q. Have you had any communications about Carl 03:20                  10 Malamud? 03:20                  11 A. No. 03:20                  12 Q. Have you spoken to anyone at DGS about this 03:20                  13 lawsuit? 03:20                  14 MR. YEN: Again, excluding communications 03:20                  15 with any lawyers. 03:20                  16 THE WITNESS: No. 03:20                  17 BY MR. NERCESSIAN: 03:20                  18 Q. Like to return back to Exhibit 2 a moment, 03:21                  19 and I'd like to call your attention again to the 03:21                  20 front page of the exhibit. Aside from those 03:21                  21 notations on the cover page of the exhibit, do you 03:21                  22 recognize this document? 03:21                  23 MS. MILLER-ZIEGLER: Objection. 03:21                  24 Authenticity. 03:21                  25 MR. FEE: What are you calling the cover 03:21</p> <p style="text-align: right;">Page 153</p>

<p>1 page? 03:21                  2 MR. NERCESSIAN: Aside -- okay. Strike 03:21                  3 that. 03:21                  4 BY MR. NERCESSIAN: 03:21                  5 Q. I want to direct your attention to the 03:21                  6 page that reads "2016 California Electrical Code, 03:22                  7 California Code of Regulations, Title 24, Part 3." 03:22                  8 Do you see that? 03:22                  9 A. I see that. 03:22                  10 Q. Aside from the notations on this page, do 03:22                  11 you recognize this document? 03:22                  12 MR. FEE: Objection to form. 03:22                  13 MS. MILLER-ZIEGLER: Objection. 03:22                  14 MR. FEE: You're asking him to review every 03:22                  15 page of both of these binders and tell you if she 03:22                  16 recognizes it? What's the question? 03:22                  17 MR. NERCESSIAN: That's the question, does 03:22                  18 she recognize this document. 03:22                  19 MS. MILLER-ZIEGLER: Objection. 03:22                  20 Authenticity. 03:22                  21 THE WITNESS: Yeah. It appears that it's 03:22                  22 the California Electrical Code, but, again, it's a 03:22                  23 huge document to take a look at. 03:22                  24 BY MR. NERCESSIAN: 03:22                  25 Q. Any reason why, leaving aside the notations 03:22                  Page 154</p>	<p>1 Q. So is there anything you can point to apart 03:24                  2 from the cover that makes you doubt that this is the 03:24                  3 California Electrical Code? 03:24                  4 MS. MILLER-ZIEGLER: Same objection. 03:24                  5 BY MR. NERCESSIAN: 03:24                  6 Q. You can take time to skim it. 03:24                  7 MS. MILLER-ZIEGLER: The document's a 03:24                  8 thousand pages. 03:24                  9 THE WITNESS: I understand that you want me 03:24                  10 to say that it's consistent, but I can't tell you 03:24                  11 exactly if it's the code. It's similar in nature, 03:24                  12 but I can't say that it is exactly the code. 03:24                  13 BY MR. NERCESSIAN: 03:25                  14 Q. Do you recognize anything that suggests it 03:25                  15 isn't? And you can take five to ten minutes to skim 03:25                  16 through and look for something. 03:25                  17 A. Well, I'm not -- 03:25                  18 MS. MILLER-ZIEGLER: Same objection. 03:25                  19 THE WITNESS: Yeah. I'm not an expert on 03:25                  20 everything that's in the California Electrical Code, 03:25                  21 so for me to see something that is inconsistent, I 03:25                  22 couldn't -- I'd have to look at every page, and I'm 03:25                  23 not an expert on the California Electrical Code. 03:25                  24 BY MR. NERCESSIAN: 03:26                  25 Q. I'm just looking for something, one thing 03:26                  Page 156</p>
<p>1 on the cover page, that includes the title -- strike 03:22                  2 that. 03:23                  3 Leaving aside the notations on the title 03:23                  4 page, anything apart from the cover that does not 03:23                  5 look consistent with the 2016 California Electrical 03:23                  6 Code? 03:23                  7 MR. YEN: And if you need to look through it 03:23                  8 to make sure that you can answer his question, 03:23                  9 then -- 03:23                  10 THE WITNESS: Okay. And -- 03:23                  11 MR. YEN: -- go ahead. 03:23                  12 THE WITNESS: -- what do you mean by 03:23                  13 "consistent"? 03:23                  14 BY MR. NERCESSIAN: 03:23                  15 Q. By "consistent," I mean is there anything 03:23                  16 that looks out of -- strike that. 03:23                  17 Is there anything apart from those notations 03:23                  18 on the cover page that cause you to believe this 03:24                  19 isn't the California Electrical Code? 03:24                  20 MS. MILLER-ZIEGLER: Objection. She can't 03:24                  21 possibly look through all thousand pages of this 03:24                  22 right now. 03:24                  23 THE WITNESS: I can't verify that. It 03:24                  24 appears to be an enormous amount of material. 03:24                  25 BY MR. NERCESSIAN: 03:24                  Page 155</p>	<p>1 other than those notations that makes you doubt that 03:26                  2 this is the 2016 California Electrical Code. Can you 03:26                  3 do that? 03:26                  4 MS. MILLER-ZIEGLER: Objection. You haven't 03:26                  5 given her a copy of the California Electrical Code. 03:26                  6 I'm not sure how she's supposed to make that 03:26                  7 determination right now. 03:26                  8 THE WITNESS: I don't -- sorry. Repeat the 03:26                  9 question again. 03:26                  10 BY MR. NERCESSIAN: 03:26                  11 Q. Is there anything, one thing other than the 03:26                  12 notations on the cover page that reads "2016 03:27                  13 California Electrical Code" that makes you doubt that 03:27                  14 this is the 2016 California Electrical Code? 03:27                  15 MS. MILLER-ZIEGLER: Objection. You're 03:27                  16 asking her to authenticate a document, and you 03:27                  17 haven't given her an actual copy of that document to 03:27                  18 do so. 03:27                  19 THE WITNESS: Yeah. Again, I'm not an 03:27                  20 expert on the California Electrical Code, so I 03:27                  21 wouldn't know where to look to authenticate or not 03:27                  22 authenticate. 03:27                  23 BY MR. NERCESSIAN: 03:27                  24 Q. Yeah. And I'm not asking for you to 03:27                  25 authenticate it. I'm asking whether you see 03:27                  Page 157</p>



1 anything, aside from those notations, that makes you 03:27  
 2 doubt its authenticity. 03:27  
 3 MS. MILLER-ZIEGLER: I'll renew my 03:28  
 4 objection. 03:28  
 5 THE WITNESS: Again, I don't know. I'd 03:28  
 6 have -- I don't know the whole code. It's similar. 03:28  
 7 BY MR. NERCESSIAN: 03:28  
 8 Q. So there's nothing that you see aside from 03:28  
 9 those two notations on the cover page that makes you 03:28  
 10 doubt the authenticity of this document as the 2016 03:28  
 11 California Electrical Code? 03:28  
 12 MS. MILLER-ZIEGLER: Objection. That 03:28  
 13 mischaracterizes what she said. 03:28  
 14 THE WITNESS: Yeah. That's not what I said. 03:28  
 15 There's nothing I can find either way, so I don't 03:28  
 16 have an answer. 03:28  
 17 BY MR. NERCESSIAN: 03:28  
 18 Q. And do you recognize any part of this 03:28  
 19 document as including a portion that you recognize to 03:28  
 20 be the California Electrical Code? 03:28  
 21 MS. MILLER-ZIEGLER: Objection. 03:28  
 22 Authenticity. 03:28  
 23 THE WITNESS: There's one section I 03:28  
 24 recognize because the Building Standards Commission 03:29  
 25 proposed regulations, so I do see one section that is 03:29  
 Page 158

1 in the code. 03:29  
 2 BY MR. NERCESSIAN: 03:29  
 3 Q. And what section is that? 03:29  
 4 A. It's Article 625. It's in the second 03:29  
 5 volume. It's on page 70-567. It's Article 625, and 03:29  
 6 it's Section 625.1.1, and where you see the "BSC-CG" 03:29  
 7 banner, the Building Standards Commission proposed 03:29  
 8 that amendment with HCD. 03:29  
 9 Q. And this provision has, along the side, a 03:29  
 10 notation that reads vertically "CACACAC." Is that to 03:30  
 11 indicate that this is a California amendment? 03:30  
 12 A. Yes. 03:30  
 13 Q. Who handles the advertising for the 03:30  
 14 California Electrical Code? 03:30  
 15 MS. MILLER-ZIEGLER: Objection. Lacks 03:30  
 16 foundation. 03:30  
 17 THE WITNESS: Not the Building Standards 03:30  
 18 Commission. 03:30  
 19 BY MR. NERCESSIAN: 03:30  
 20 Q. Are you aware what entity does the 03:30  
 21 advertising for the California Electrical Code? 03:30  
 22 A. I don't want to speculate. I don't know. 03:30  
 23 Q. Are you aware of whether any other State 03:30  
 24 agencies advertise the California Electrical Code? 03:31  
 25 A. I don't know. 03:31  
 Page 159

1 Q. Are you aware whether any other State 03:31  
 2 agencies sell the California Electrical Code? 03:31  
 3 A. I don't know that either. 03:31  
 4 Q. No further questions. 03:31  
 5 A. You're done-done? 03:31  
 6 Q. I'm done-done. 03:31  
 7 A. Okay. Sorry.  
 8 No, I know, I know. I'm not done, he's 03:31  
 9 done. 03:31  
 10 MR. YEN: You want to go off the record? 03:31  
 11 VIDEO OPERATOR: We're off the record. It's 03:31  
 12 3:31. 03:31  
 13 (Recess) 03:31  
 14 VIDEO OPERATOR: Okay. We're back on the 03:35  
 15 record. It's 3:35. 03:35  
 16 EXAMINATION 03:35  
 17 BY MS. MILLER-ZIEGLER: 03:35  
 18 Q. Ms. Marvelli, my name is Rachel 03:35  
 19 Miller-Ziegler. I represent National Fire Protection 03:35  
 20 Association, and we just have few areas that we want 03:35  
 21 to follow up on or ask additional questions on. 03:35  
 22 So the first question is have the two of us 03:35  
 23 ever met before today? 03:35  
 24 A. No. 03:35  
 25 Q. Have we ever spoken before today? 03:35  
 Page 160

1 A. No. 03:35  
 2 Q. Thanks. As we've talked some today about 03:35  
 3 the standards that CBSC uses to develop the 03:35  
 4 California Building Standards Code, I'd like to talk 03:35  
 5 to you a little bit more about those to start. 03:36  
 6 Earlier in your testimony, you described 03:36  
 7 these standards as very detail-oriented. Do you 03:36  
 8 remember saying that? 03:36  
 9 A. No. 03:36  
 10 MR. NERCESSIAN: Objection. 03:36  
 11 Mischaracterizes testimony. 03:36  
 12 BY MS. MILLER-ZIEGLER: 03:36  
 13 Q. It's at minute 22:15. I think you said 03:36  
 14 these are reference stats that are very detail 03:36  
 15 oriented. Would you say that the standards that CBSC 03:36  
 16 relies on are detailed? 03:36  
 17 A. Yes. 03:36  
 18 Q. They tend to be rather long documents? 03:36  
 19 A. The reference standards in the various codes 03:36  
 20 are detailed, yes. 03:36  
 21 Q. And are you familiar with the process that 03:36  
 22 goes into developing those standards? 03:36  
 23 A. Not completely. 03:36  
 24 Q. Do you have some vague level of familiarity 03:36  
 25 with that? 03:36  
 Page 161

<p>1 A. Vague level, yes. 03:36                  2 Q. I want to talk -- wet, let's talk generally. 03:36                  3 Could you tell me what you know about that process? 03:36                  4 MR. NERCESSIAN: Objection. Calls for 03:37                  5 speculation. 03:37                  6 THE WITNESS: All I know is that it's -- the 03:37                  7 amendments, at a national level, to any model code, 03:37                  8 are done through a national vetting. The reference 03:37                  9 standards within those, I'm not familiar with that 03:37                  10 process. 03:37                  11 BY MS. MILLER-ZIEGLER: 03:37                  12 Q. When you say that -- the amendments at a 03:37                  13 national level, are you talking about, for example, 03:37                  14 amendments to the National Electrical Code? 03:37                  15 MR. NERCESSIAN: Objection. 03:37                  16 THE WITNESS: Yes. 03:37                  17 BY MS. MILLER-ZIEGLER: 03:37                  18 Q. Okay. Let's talk a little bit about the 03:37                  19 process to develop something like the electrical 03:37                  20 code. Are you familiar with what that process looks 03:37                  21 like? 03:37                  22 MR. NERCESSIAN: Objection. 03:37                  23 THE WITNESS: Less familiar with the 03:37                  24 electrical code and more familiar with the 03:37                  25 International Code Council's process for the various 03:37                  Page 162</p>	<p>1 allowed to participate in that process? 03:38                  2 A. I don't know. 03:38                  3 Q. Okay. Let's assume for a moment that the 03:38                  4 CBSC couldn't rely on something like the National 03:38                  5 Electrical Code to develop the California Electrical 03:38                  6 Code. How would the Building Standards Commission go 03:39                  7 about developing the CEC if it didn't have the NEC? 03:39                  8 MR. NERCESSIAN: Objection. 03:39                  9 THE WITNESS: I don't know how that would 03:39                  10 happen. 03:39                  11 BY MS. MILLER-ZIEGLER: 03:39                  12 Q. Would it be an incredibly resource-intensive 03:39                  13 process? 03:39                  14 MR. NERCESSIAN: Same objection. 03:39                  15 THE WITNESS: I don't know. I don't want to 03:39                  16 speculate. 03:39                  17 BY MS. MILLER-ZIEGLER: 03:39                  18 Q. Would you agree that it would be more 03:39                  19 difficult for the CBSC to make the California 03:39                  20 Electrical Code if it couldn't incorporate elements 03:39                  21 of the National Electrical Code? 03:39                  22 MR. NERCESSIAN: Same objection. 03:39                  23 THE WITNESS: I would agree that it would be 03:39                  24 more difficult, yes. 03:39                  25 BY MS. MILLER-ZIEGLER: 03:39                  Page 164</p>
<p>1 codes that they develop. 03:37                  2 BY MS. MILLER-ZIEGLER: 03:37                  3 Q. Could you tell me what your understanding of 03:37                  4 that process is? 03:37                  5 MR. NERCESSIAN: Objection. Vague, calls 03:37                  6 for speculation. 03:38                  7 THE WITNESS: The process for the 03:38                  8 International Building Code, for example, is there 03:38                  9 are entities out there that propose code changes, and 03:38                  10 they go through a code development process, they're 03:38                  11 voted on at a national level, and then they're 03:38                  12 correlated and published into the next edition of 03:38                  13 the -- for example, the International Building Code. 03:38                  14 BY MS. MILLER-ZIEGLER: 03:38                  15 Q. Is it your understanding that there's 03:38                  16 technical experts involved in that process? 03:38                  17 A. Yes. 03:38                  18 MR. NERCESSIAN: Objection. 03:38                  19 BY MS. MILLER-ZIEGLER: 03:38                  20 Q. Is it your understanding that there is some 03:38                  21 industry participation in that process? 03:38                  22 A. Yes. 03:38                  23 MR. NERCESSIAN: Objection. 03:38                  24 BY MS. MILLER-ZIEGLER: 03:38                  25 Q. Is it your understanding that the public is 03:38                  Page 163</p>	<p>1 Q. You said, I think, earlier that your office 03:39                  2 has 14 staff; is that correct? 03:39                  3 A. Yes. 03:39                  4 Q. Do you think it would be possible for that 03:39                  5 14 staff office to write the California Electrical 03:39                  6 Code from scratch? 03:40                  7 MR. NERCESSIAN: Objection. 03:40                  8 THE WITNESS: No, would not be possible. 03:40                  9 BY MS. MILLER-ZIEGLER: 03:40                  10 Q. Do you think it would be possible for your 03:40                  11 office and the commissioners to write the code from 03:40                  12 scratch? 03:40                  13 MR. NERCESSIAN: Same objection. 03:40                  14 THE WITNESS: No. 03:40                  15 BY MS. MILLER-ZIEGLER: 03:40                  16 Q. Would it be fair to say that the California 03:40                  17 Building Codes Commission relies a great deal on the 03:40                  18 National Electrical Code? 03:40                  19 MR. NERCESSIAN: Objection. 03:40                  20 THE WITNESS: We're required by law to adopt 03:40                  21 the National Electrical Code, so that's where we rely 03:40                  22 on, yeah. 03:40                  23 BY MS. MILLER-ZIEGLER: 03:40                  24 Q. Does your office view the codes that you -- 03:40                  25 excuse me -- the standards that you adopt as 03:40                  Page 165</p>

1 high-quality standards? 03:41  
 2 MR. NERCESSIAN: Objection. 03:41  
 3 THE WITNESS: Well, they're the minimum 03:41  
 4 building standards for the State of California to 03:41  
 5 use. 03:41  
 6 BY MS. MILLER-ZIEGLER: 03:41  
 7 Q. I think earlier you talked about these 03:41  
 8 standards, or at least some of these standards are 03:41  
 9 important for health and safety in the State; is that 03:41  
 10 correct? 03:41  
 11 A. That is correct. 03:41  
 12 Q. Would CBSC rely on codes that -- would CBSC 03:41  
 13 rely on inferior or poor-quality codes to regulate 03:41  
 14 health and safety in the State? 03:41  
 15 A. I'm not sure ow to answer. I don't have an 03:41  
 16 answer for that question. Sorry. It's vague. 03:41  
 17 Q. Sure. Earlier, I think you said that one of 03:41  
 18 the nine-point criteria is that California codes are 03:41  
 19 supposed to protect public health and safety; is that 03:42  
 20 right? 03:42  
 21 A. Yes. 03:42  
 22 Q. So something like the CEC, that incorporates 03:42  
 23 parts of the NEC. In doing so, do you think that 03:42  
 24 reflects a judgment that the NEC adequately protects 03:42  
 25 health and safety? 03:42

Page 166

1 MR. NERCESSIAN: Objection. 03:42  
 2 THE WITNESS: That the nine-point criteria 03:42  
 3 is met, then yes. 03:42  
 4 BY MS. MILLER-ZIEGLER: 03:42  
 5 Q. So in relying on the NEC as part of the CEC, 03:42  
 6 the commissioners are making a judgment that those 03:42  
 7 parts of the NEC that they incorporate are methods of 03:42  
 8 protecting public health and safety in the State; is 03:42  
 9 that right? 03:42  
 10 MR. NERCESSIAN: Objection. 03:42  
 11 THE WITNESS: That's the determination that 03:42  
 12 the commissions have made if they so choose to adopt 03:42  
 13 those codes. 03:42  
 14 BY MS. MILLER-ZIEGLER: 03:42  
 15 Q. I want to talk to you some about your 03:42  
 16 agreements with NFPA in particular. If you could 03:43  
 17 turn to Exhibit 7 in the stack. 03:43  
 18 A. Uh-huh. Okay. 03:43  
 19 Q. Do you remember talking about this earlier? 03:43  
 20 A. Yes. 03:43  
 21 Q. And this was the 2016 agreement for the 2016 03:43  
 22 CEC; is that right? 03:43  
 23 A. Yes. 03:43  
 24 Q. If I could have you turn to the second 03:43  
 25 page of the exhibit. So in that first paragraph, the 03:43

Page 167

1 final sentence, it reads "The National Fire 03:43  
 2 Protection Association, Inc. (NFPA) owns a copyright 03:43  
 3 to the National Electrical Code and the acronym 03:43  
 4 (NEC)." Is that what it says? 03:43  
 5 A. Yes. 03:43  
 6 Q. And then if I could have you look at just a 03:43  
 7 little farther down, section one, paragraph A. So 03:43  
 8 that says "NFPA is the sole owner of the copyright to 03:44  
 9 the NFPA 70 National Electrical Code 2014 Edition." 03:44  
 10 Is that what that says? 03:44  
 11 A. Yes. 03:44  
 12 Q. So earlier today, you got asked some 03:44  
 13 questions about whether publishers of the code 03:44  
 14 claimed copyright in the California Electrical Code, 03:44  
 15 and I just want to clarify for the record that based 03:44  
 16 on these paragraphs, what NFPA is claiming copyright 03:44  
 17 in is the National Electrical Code, not the 03:44  
 18 California Electrical Code; is that right? 03:44  
 19 MR. NERCESSIAN: Objection. 03:44  
 20 THE WITNESS: That's what this contract 03:44  
 21 says, yes. 03:44  
 22 BY MS. MILLER-ZIEGLER: 03:44  
 23 Q. Do you see any -- did anything I just read 03:44  
 24 say anything about NFPA claiming copyright in the 03:44  
 25 California Electrical Code? 03:44

Page 168

1 A. Not in these, no. 03:44  
 2 Q. Did anything in what I just read say 03:44  
 3 anything about the NFPA claiming copyright in the 03:44  
 4 California amendments? 03:44  
 5 A. No. 03:44  
 6 Q. You also spoke some today about the process 03:44  
 7 that goes into developing the California Electrical 03:45  
 8 Code. I won't try to summarize the entire thing, but 03:45  
 9 is it fair to say that at a high level, various State 03:45  
 10 agencies and the commissioners, among others, are 03:45  
 11 involved in developing the California Electrical 03:45  
 12 Code? 03:45  
 13 A. Yes. 03:45  
 14 MR. NERCESSIAN: Objection. 03:45  
 15 BY MS. MILLER-ZIEGLER: 03:45  
 16 Q. State agencies sometimes draft amendments 03:45  
 17 for the California Electrical Code; is that right? 03:45  
 18 A. Yes. 03:45  
 19 Q. And the commission is the one that's 03:45  
 20 ultimately responsible for taking one of those four 03:45  
 21 actions that you spoke about earlier with respect to 03:45  
 22 the code; is that right? 03:45  
 23 A. Yes. 03:45  
 24 Q. If I could have you look back at Exhibit 7. 03:45  
 25 Let's see. It looks like the fourth page of 03:45

Page 169

<p>1 Exhibit A. It begins, paragraph six, "Work Details." 03:45                  2 So if you look in the first few lines of paragraph A, 03:45                  3 it says "NFPA shall, in accordance with the specific 03:46                  4 formatting requirements and editorial and education 03:46                  5 timetable set forth herein, print, publish and make 03:46                  6 available for sale to the State of California, local 03:46                  7 government agencies and to the general public, on or 03:46                  8 before July 1st, 2016, or at a later date as set by 03:46                  9 CBSC, copies of the 2016 CEC"; is that right? 03:46                  10 A. Yes. 03:46                  11 Q. So would it be correct to say that what I 03:46                  12 just read indicates that NFPA is responsible for 03:46                  13 printing and publishing the 2016 CEC? 03:46                  14 MR. NERCESSIAN: Objection. 03:46                  15 THE WITNESS: Yes, that's accurate. 03:46                  16 BY MS. MILLER-ZIEGLER: 03:46                  17 Q. Does the portion of the sentence I read say 03:46                  18 anything about NFPA being responsible for determining 03:46                  19 the content of the 2016 CEC? 03:46                  20 A. No, not here, no, not what you just read. 03:46                  21 Q. Did what I just read say anything about NFPA 03:46                  22 drafting California amendment for the CEC? 03:46                  23 A. No. 03:47                  24 Q. Did what I just read say anything about NFPA 03:47                  25 approving or taking any of those four actions that 03:47</p> <p style="text-align: right;">Page 170</p>	<p>1 agreement signed? When was your signature on this 03:47                  2 agreement? 03:48                  3 A. May 16th, 2016. 03:48                  4 Q. And if you look at the second page, that top 03:48                  5 paragraph under "Scope of Work," what version of the 03:48                  6 NEC does the 2016 CEC incorporate? 03:48                  7 A. The 2014 National Electrical Code. 03:48                  8 Q. Is it your understanding that the 2014 NEC 03:48                  9 was already completed in 2016? 03:48                  10 A. Yes. 03:48                  11 Q. In fact, wasn't the 2014 NEC already 03:48                  12 copyrighted in 2016? 03:48                  13 MR. NERCESSIAN: Objection. 03:48                  14 THE WITNESS: Yeah. I don't know the answer 03:48                  15 to that. 03:48                  16 BY MS. MILLER-ZIEGLER: 03:48                  17 Q. Sure. So if you look at that top 03:48                  18 paragraph -- sorry. Actually, if you look at 03:48                  19 paragraph 1-A where it says "NFPA is the sole owner 03:48                  20 of the copyright to the NFPA 70 National Electrical 03:48                  21 Code 2014 Edition," that sentence would seem to 03:48                  22 suggest that at the time this agreement was signed, 03:49                  23 the NFPA held copyright in the 2014 Edition of the 03:49                  24 NEC. Does that sound right? 03:49                  25 MR. NERCESSIAN: Objection. 03:49</p> <p style="text-align: right;">Page 172</p>
<p>1 the commission takes with respect to the California 03:47                  2 Electrical Code? 03:47                  3 A. No. 03:47                  4 Q. Are you aware of any way in which NFPA is 03:47                  5 involved in dictating the content of the California 03:47                  6 Electrical Code? 03:47                  7 MR. NERCESSIAN: Objection. 03:47                  8 THE WITNESS: I don't know what you mean by 03:47                  9 "dictating the content." 03:47                  10 BY MS. MILLER-ZIEGLER: 03:47                  11 Q. Sure. So are you aware of any way in which 03:47                  12 NFPA drafts amendments -- excuse me -- drafts 03:47                  13 California amendments for the California Electrical 03:47                  14 Code? 03:47                  15 A. Not California amendments, no. 03:47                  16 Q. Are you aware of any way in which NFPA 03:47                  17 approves the California Electrical Code? 03:47                  18 A. No. 03:47                  19 MR. NERCESSIAN: Objection. 03:47                  20 BY MS. MILLER-ZIEGLER: 03:47                  21 Q. I want to talk to you about the other side 03:47                  22 of things, California's role in determining the 03:47                  23 content of the National Electrical Code. If you keep 03:47                  24 looking at this 2016 agreement as an example, if you 03:47                  25 could flip back to the first page. When was this 03:47</p> <p style="text-align: right;">Page 171</p>	<p>1 THE WITNESS: That's what this reads, yes. 03:49                  2 BY MS. MILLER-ZIEGLER: 03:49                  3 Q. So if the 2014 NEC was already completely 03:49                  4 drafted at the time that you signed this agreement, 03:49                  5 could this agreement have dictated the content of the 03:49                  6 2014 NEC? 03:49                  7 MR. NERCESSIAN: Objection. 03:49                  8 THE WITNESS: I don't believe so. 03:49                  9 BY MS. MILLER-ZIEGLER: 03:49                  10 Q. I want to move to talking a little bit about 03:49                  11 how people get access to the CEC. Are there ways 03:49                  12 that somebody could view the CEC for free? 03:49                  13 A. Yes. 03:49                  14 Q. Could you tell me what those ways include? 03:49                  15 A. Through our website, there's a link to the 03:49                  16 publisher, and they could view the code, the CEC for 03:49                  17 free there. 03:50                  18 Q. So it doesn't cost any money to view the CEC 03:50                  19 online in that method? 03:50                  20 A. In that method, correct. 03:50                  21 MR. NERCESSIAN: Objection. 03:50                  22 BY MR. NERCESSIAN: 03:50                  23 Q. Do you know if the NEC is available online? 03:50                  24 A. I don't know. 03:50                  25 Q. You got asked some questions today about 03:50</p> <p style="text-align: right;">Page 173</p>

1 whether you had ever viewed the CEC online. Do you 03:50  
 2 remember that? 03:50  
 3 A. Yes. 03:50  
 4 Q. You were asked whether you had tried to 03:50  
 5 print or extract text from the CEC? 03:50  
 6 A. Yes. 03:50  
 7 Q. And you said you hadn't attempted to do 03:50  
 8 that; right? 03:50  
 9 A. Correct. 03:50  
 10 Q. You were, however, able to view the CEC 03:50  
 11 online; correct? 03:50  
 12 A. Yes. 03:50  
 13 MR. NERCESSIAN: Objection. 03:50  
 14 BY MS. MILLER-ZIEGLER: 03:50  
 15 Q. You were able to read the code online 03:50  
 16 through free access; is that right? 03:50  
 17 A. Yes. 03:50  
 18 MR. NERCESSIAN: Objection. 03:50  
 19 BY MS. MILLER-ZIEGLER: 03:50  
 20 Q. So is there another way that somebody could 03:50  
 21 read the CEC for free? Are there print copies 03:50  
 22 available for free anywhere? 03:50  
 23 A. Yes. 03:50  
 24 Q. Where are those print copies available? 03:50  
 25 A. I spoke earlier about local -- 03:50  
 Page 174

1 MR. NERCESSIAN: Objection. 03:50  
 2 BY MS. MILLER-ZIEGLER: 03:51  
 3 Q. Go ahead. 03:51  
 4 A. Okay. I spoke earlier about local 03:51  
 5 jurisdictions make available the code and also the 03:51  
 6 repository libraries and law libraries that were in 03:51  
 7 the back of the exhibit. They're made available 03:51  
 8 there. 03:51  
 9 Q. Great. And so if we could look at -- let's 03:51  
 10 see. If you could look at the very last page of 03:51  
 11 Exhibit 7. So on that top paragraph, the first full 03:51  
 12 sentence, it reads "During the term of this 03:51  
 13 agreement, NFPA shall deliver complimentary copies of 03:51  
 14 the 2016 CEC and automatically any 2016 CEC 03:51  
 15 supplements, supplements to the 2016 CEC in response 03:51  
 16 to emergency regulations, and all related errata 03:51  
 17 sheets, directly to the deposit libraries listed in 03:52  
 18 Attachment A hereto in the quantities set forth 03:52  
 19 therein, and one copy each to the Selective 03:52  
 20 Depository Libraries listed in Attachment B hereto,  
 21 and copies to the State agencies as directed by 03:52  
 22 CBSC." Do you see that on that page? 03:52  
 23 A. Yes. 03:52  
 24 Q. So am I correct in saying that based on this 03:52  
 25 sentence I read, NFPA is required to deliver copies 03:52  
 Page 175

1 to the deposit libraries in Attachment A, selected 03:52  
 2 deposit libraries in Attachment B, and copies to 03:52  
 3 State agencies? 03:52  
 4 A. Yes. 03:52  
 5 Q. Okay. If I could have you take a look at 03:52  
 6 Attachment A. It's numbered 263332 in the bottom if 03:52  
 7 that helps. 03:52  
 8 A. I'm sorry. Which one? 03:52  
 9 Q. Exhibit A, Attachment A. 03:52  
 10 A. Attachment -- Exhibit A, Attachment A. 03:52  
 11 Okay. Hold on here. Okay. Ending in 32? 03:53  
 12 Q. Yes. Exactly. 03:53  
 13 A. Okay. 03:53  
 14 Q. So could you tell me what's listed on this 03:53  
 15 page? 03:53  
 16 A. It appears it's a complete depository 03:53  
 17 library list that we provided NFPA. 03:53  
 18 Q. So under the agreement with NFPA, NFPA is 03:53  
 19 required to deliver copies of the CEC to each of 03:53  
 20 these; is that right? 03:53  
 21 A. That's requirement, yes. 03:53  
 22 Q. And if you could flip two pages forward to 03:53  
 23 Exhibit A, Attachment B. 03:53  
 24 A. Yes. 03:53  
 25 Q. Could you tell me what's on this page? 03:53  
 Page 176

1 A. Selective Depository Libraries, a list. 03:53  
 2 Q. And under the agreement with CBSC, NEC would 03:53  
 3 be required to deliver copies to each of these 03:53  
 4 libraries; is that right? 03:54  
 5 A. Yes. 03:54  
 6 Q. Not going to make you count all the 03:54  
 7 libraries on this page or in this attachment, but 03:54  
 8 could you just tell me how many pages the attachment 03:54  
 9 is? 03:54  
 10 A. Are you referring to Attachment B? 03:54  
 11 Q. Yes. Exhibit A, Attachment B. 03:54  
 12 A. Four pages. 03:54  
 13 Q. Can you flip back to Exhibit A, 03:54  
 14 Attachment A? 03:54  
 15 A. Okay. 03:54  
 16 Q. So you were asked earlier today whether you 03:54  
 17 knew where the closest law library was that you could 03:54  
 18 view a copy of the California Electrical Code. Do 03:54  
 19 you remember that? 03:54  
 20 A. Yes. 03:54  
 21 Q. So if you can look at the complete 03:54  
 22 depository list. What city is the first item in the 03:54  
 23 list? 03:54  
 24 A. Sacramento. 03:54  
 25 Q. And what city is the second item in the 03:54  
 Page 177

1 list? 03:54  
 2 A. Sacramento. 03:54  
 3 Q. If I can have you turn to Exhibit A, 03:54  
 4 Attachment B, the first page. If you look at that 03:54  
 5 list, third from the bottom, what city is that 03:55  
 6 library? 03:55  
 7 A. Sacramento. 03:55  
 8 Q. If I can have you turn to the next page. 03:55  
 9 Second library down, what city is that? 03:55  
 10 A. Sacramento. 03:55  
 11 Q. If you look near the bottom, the McGeorge 03:55  
 12 School of Law, what city is that library? 03:55  
 13 A. Sacramento. 03:55  
 14 Q. If I can have you flip to the next page. 03:55  
 15 Looks like sixth one down. Sixth one down, what city 03:55  
 16 is that library? 03:55  
 17 A. Sacramento. 03:55  
 18 Q. And the one underneath that, what city is 03:55  
 19 that library there? 03:55  
 20 A. Sacramento. 03:55  
 21 Q. So there would be at least seven different 03:55  
 22 places within the Sacramento area that you could view 03:55  
 23 a copy of the California Electrical Code for free; is 03:55  
 24 that right? 03:55  
 25 MR. NERCESSIAN: Objection. 03:55  
 Page 178

1 THE WITNESS: That's what this document 03:55  
 2 states, yes. 03:55  
 3 BY MS. MILLER-ZIEGLER: 03:55  
 4 Q. Would it be fair to say that there's a 03:55  
 5 number of places that somebody in this area could 03:56  
 6 view the CEC for free then? 03:56  
 7 A. Yes. 03:56  
 8 MR. NERCESSIAN: Objection. 03:56  
 9 BY MS. MILLER-ZIEGLER: 03:56  
 10 Q. Are you aware of anyone who wanted to access 03:56  
 11 the California Electrical Code who was unable to do 03:56  
 12 so? 03:56  
 13 MR. NERCESSIAN: Objection. 03:56  
 14 THE WITNESS: I'm not aware of that. 03:56  
 15 BY MS. MILLER-ZIEGLER: 03:56  
 16 Q. You said earlier that sometimes CBSC would 03:56  
 17 get calls about broken links. Do you recall if any 03:56  
 18 of those calls were about the California Electrical 03:56  
 19 Code specifically? 03:56  
 20 A. Yes. 03:56  
 21 Q. And you got asked some questions about 03:56  
 22 whether CBSC has taken efforts to make the California 03:56  
 23 Electrical Code available to certain populations 03:56  
 24 including the print disabled. Are you aware of any 03:56  
 25 requests CBSC has received about making its codes 03:56  
 Page 179

1 available to print disabled individuals? 03:56  
 2 MR. NERCESSIAN: Objection. 03:56  
 3 THE WITNESS: Not for the electrical code, 03:56  
 4 I'm not aware of any questions. 03:56  
 5 BY MS. MILLER-ZIEGLER: 03:56  
 6 Q. Are you aware of any requests that CBSC has 03:56  
 7 received about making the California Electrical Code 03:57  
 8 available to mobility impaired individuals? 03:57  
 9 A. No. 03:57  
 10 Q. Are you aware of any requests CBSC has 03:57  
 11 received about making the California Electrical Code 03:57  
 12 available to those who lack sight? 03:57  
 13 A. No. 03:57  
 14 Q. Are you aware of any requests CBSC has 03:57  
 15 received about making California Electrical Code 03:57  
 16 available to those with accessibility issues? 03:57  
 17 A. No. 03:57  
 18 Q. If I could have you take a look at 03:57  
 19 Exhibit 6. We talked some earlier today -- you 03:57  
 20 talked some earlier today about this first email in 03:57  
 21 this stack. 03:57  
 22 A. Uh-huh. 03:57  
 23 Q. So I'll read that first sentence. "Just 03:57  
 24 received a phone call from Suren at (818) 506-6671, 03:57  
 25 and he tried to review the code, Part 2.5, on the BSC 03:57  
 Page 180

1 website, and it came up with screen print below the 03:58  
 2 ICC page and wanting him to pay for the premium 03:58  
 3 access in order to view the code." Do you see that 03:58  
 4 written there? 03:58  
 5 A. I see that written there. 03:58  
 6 Q. So that refers to Part 2.5 of the code; is 03:58  
 7 that right? 03:58  
 8 A. Yes. 03:58  
 9 Q. So that's not the California Electrical 03:58  
 10 Code; right? 03:58  
 11 A. That's correct. 03:58  
 12 Q. And it refers to the ICC; is that right? 03:58  
 13 A. That's correct. 03:58  
 14 Q. It's not the NFPA; is that correct? 03:58  
 15 A. Correct. 03:58  
 16 Q. So this email is not about any issues with 03:58  
 17 the California Electrical Code; is that correct? 03:58  
 18 A. That is correct. 03:58  
 19 Q. Sorry to make you go through all these 03:58  
 20 exhibits, but if you can turn to Exhibit 3. So if 03:58  
 21 you could turn to page three of this exhibit. This 03:58  
 22 has some language from the CBSC website; is that 03:59  
 23 right? 03:59  
 24 A. Yes. 03:59  
 25 Q. You talked some about that final paragraph 03:59  
 Page 181

1 on page three that begins "All occupancies." Do you 03:59  
 2 remember talking about that? 03:59  
 3 A. Yes. 03:59  
 4 Q. The first part of that sentence reads "All 03:59  
 5 occupancies in California are subject to national 03:59  
 6 model codes adopted into Title 24." Do you see that? 03:59  
 7 A. Yes. 03:59  
 8 Q. And you were asked whether this meant that 03:59  
 9 this applied to all office buildings and schools and 03:59  
 10 hospitals. Do you remember being asked those 03:59  
 11 questions? 03:59  
 12 A. Yes. 03:59  
 13 Q. So you weren't asked about the second part 03:59  
 14 of that sentence, though, which I'll read now: Says 03:59  
 15 "and occupancies are further subject to amendments 03:59  
 16 adopted by State agencies and ordinances implemented 03:59  
 17 by local jurisdictions' governing bodies." Do you 03:59  
 18 see that on the page? 03:59  
 19 A. Yes. 03:59  
 20 Q. So this means that something like a hospital 03:59  
 21 in California would be subject to whatever local 03:59  
 22 amendments State agencies or other local 04:00  
 23 jurisdictions made; is that right? 04:00  
 24 MR. NERCESSIAN: Objection. 04:00  
 25 THE WITNESS: I'm sorry. Could you repeat 04:00  
 Page 182

1 the question? Sorry. 04:00  
 2 BY MS. MILLER-ZIEGLER: 04:00  
 3 Q. Sure. So the second part of the sentence 04:00  
 4 indicates that, for example, a hospital in the State 04:00  
 5 would be subject to -- could be subject to amendments 04:00  
 6 adopted by State agencies and ordinances implemented 04:00  
 7 by local jurisdictions; is that right? 04:00  
 8 A. Hospitals. 04:00  
 9 MR. NERCESSIAN: Objection. 04:00  
 10 THE WITNESS: Hospitals would be subject to 04:00  
 11 State agency amendments. I can't speak to whether 04:00  
 12 they would be subject to local jurisdiction governing 04:00  
 13 bodies because OSHPD determines the building 04:00  
 14 standards for hospitals. 04:00  
 15 BY MS. MILLER-ZIEGLER:  
 16 Q. Okay. And so those State agencies that 04:00  
 17 might make amendments, they could make an amendment 04:00  
 18 that added language, added a requirement; is that 04:00  
 19 correct? 04:00  
 20 MR. NERCESSIAN: Objection. 04:01  
 21 THE WITNESS: They can make amendments to 04:01  
 22 the model codes that add a requirement or take away a 04:01  
 23 requirement from the model code, yes. 04:01  
 24 BY MS. MILLER-ZIEGLER: 04:01  
 25 Q. So when -- if I -- so a hospital in the 04:01  
 Page 183

1 State, it wouldn't be fully accurate to say that it's 04:01  
 2 just governed by the national model codes; is that 04:01  
 3 right? 04:01  
 4 A. That's correct. 04:01  
 5 MR. NERCESSIAN: Objection. 04:01  
 6 THE WITNESS: It's the California Electrical 04:01  
 7 Code. 04:01  
 8 BY MS. MILLER-ZIEGLER: 04:01  
 9 Q. The California Electrical Code and any other 04:01  
 10 local jurisdiction's amendments; right? 04:01  
 11 A. Well, if we're speaking specifically about 04:01  
 12 hospitals, I'm not the expert on that, so that would 04:01  
 13 be OSHPD. 04:01  
 14 Q. Let's say buildings generally within the 04:01  
 15 State might be regulated by local jurisdiction's 04:01  
 16 amendments that they would make? 04:01  
 17 A. Local jurisdictions can amend the code on 04:01  
 18 top of what California publishes as well. 04:01  
 19 Q. And that would really determine what rules a 04:01  
 20 building in California would have to follow; does 04:02  
 21 that sound right? 04:02  
 22 MR. NERCESSIAN: Objection. 04:02  
 23 THE WITNESS: That's a little vague. Sorry. 04:02  
 24 BY MS. MILLER-ZIEGLER: 04:02  
 25 Q. No problem. That set of 04:02  
 Page 184

1 jurisdiction-specific rules would determine what 04:02  
 2 governed a building in California; is that correct? 04:02  
 3 A. Not -- no. 04:02  
 4 Q. So let's -- any given building within the 04:02  
 5 State, what would it have to look to to determine how 04:02  
 6 to comply with governing regulations? 04:02  
 7 MR. NERCESSIAN: Objection. 04:02  
 8 THE WITNESS: That's kind of a broad 04:02  
 9 question. 04:02  
 10 BY MS. MILLER-ZIEGLER: 04:02  
 11 Q. Sure. I'll rephrase. 04:02  
 12 A. Okay. 04:02  
 13 Q. A building in the State would have to look 04:02  
 14 to both the California Electrical Code and any local 04:02  
 15 jurisdiction's rules to determine whether it was 04:02  
 16 complying with the law; is that right? 04:03  
 17 A. Potentially. 04:03  
 18 MR. NERCESSIAN: Same objection. 04:03  
 19 THE WITNESS: Potentially, yes. 04:03  
 20 BY MS. MILLER-ZIEGLER: 04:03  
 21 Q. No further questions from us. 04:03  
 22 MR. FEE: I don't have any questions. 04:03  
 23 MR. NERCESSIAN: I have a few. 04:03  
 24 MR. YEN: Do we want to go off the record 04:03  
 25 or -- 04:03  
 Page 185

1 MR. NERCESSIAN: Yeah, we should go off the 04:03  
 2 record while we're switching. 04:03  
 3 VIDEO OPERATOR: Okay. We're off the record 04:03  
 4 at 4:03. 04:03  
 5 (Recess) 04:03  
 6 VIDEO OPERATOR: Okay. We're back on the 04:04  
 7 record. It's 4:05. 04:05  
 8 EXAMINATION 04:05  
 9 BY MR. NERCESSIAN: 04:05  
 10 Q. All right. I have just a few more questions 04:05  
 11 regarding this contract, so that's Exhibit 7, and if 04:05  
 12 you could flip to the last page of that exhibit. 04:05  
 13 During the past round of examination, you looked at 04:05  
 14 language that said that the NFPA shall deliver copies 04:05  
 15 to the State agencies as directed by CBSC. Do you 04:05  
 16 see that language? 04:05  
 17 A. Is that item one or item two or in the first 04:06  
 18 paragraph? 04:06  
 19 Q. It's in the first paragraph. 04:06  
 20 A. Okay. 04:06  
 21 Q. It lists that there's the deposit libraries 04:06  
 22 in Attachment A -- 04:06  
 23 A. Sorry. 04:06  
 24 Q. -- and Attachment B and copies to the State 04:06  
 25 agencies as directed by CBSC. Do you see that 04:06  
 Page 186

1 language? 04:06  
 2 A. Copies to the State agencies. I know it's 04:06  
 3 here, but I'm looking. During the term of the 04:06  
 4 agreement, deliver complimentary copies of the 2016 04:06  
 5 and -- what line is it in the first paragraph? I'm 04:06  
 6 sorry. 04:06  
 7 Q. It is -- starts six lines down. 04:06  
 8 A. One, two, three, four, five, six. "Selected 04:06  
 9 depositories and copies to the State agencies as 04:06  
 10 directed." Yes, I see that. I'm sorry. 04:06  
 11 Q. No. No worries. Are you aware of any State 04:06  
 12 agencies that CBSC has directed NFPA to deliver 04:06  
 13 complimentary copies of the 2016 California 04:07  
 14 Electrical Code to? 04:07  
 15 A. I don't recall which State agencies. 04:07  
 16 Q. Do you recall whether there were any State 04:07  
 17 agencies that CBSC directed NFPA to deliver 04:07  
 18 complimentary copies of the 2016 California 04:07  
 19 Electrical Code to? 04:07  
 20 A. Yes. Yes. And I would have thought that 04:07  
 21 would have been one of the attachments in here that 04:07  
 22 listed the State agencies, but maybe that comes 04:07  
 23 later. 04:07  
 24 Q. Do you recall how many State agencies CBSC 04:07  
 25 directed NFPA to deliver complimentary copies to? 04:07  
 Page 187

1 A. I don't recall how many State agencies, no. 04:07  
 2 Q. Was it more than one? 04:07  
 3 A. Yes, it was more than one. 04:08  
 4 Q. More than three? 04:08  
 5 A. Yes. 04:08  
 6 Q. More than six? 04:08  
 7 A. Yes. 04:08  
 8 Q. More than ten? 04:08  
 9 A. I would say less than twenty, more than one. 04:08  
 10 Q. On the last round of examination, you 04:08  
 11 referred to -- again to local jurisdictions that make 04:08  
 12 available copies of the California Electrical Code 04:08  
 13 for free. To be clear, are you aware of any local 04:08  
 14 jurisdictions that do so? 04:08  
 15 A. I've not utilized that service, so I 04:08  
 16 couldn't tell you which jurisdictions make it 04:08  
 17 available. 04:08  
 18 Q. So that's a no, you're not aware of any 04:08  
 19 local jurisdictions that furnish freely available 04:08  
 20 copies of the California Electrical Code? 04:09  
 21 MS. MILLER-ZIEGLER: Objection. 04:09  
 22 Mischaracterizes her testimony. 04:09  
 23 THE WITNESS: I don't know of a 04:09  
 24 jurisdiction. 04:09  
 25 BY MR. NERCESSIAN: 04:09  
 Page 188

1 Q. Do you have any understanding whether a 04:09  
 2 California citizen is free to make a copy of the 04:09  
 3 California Electrical Code without seeking permission 04:09  
 4 from the NFPA or paying a fee? 04:09  
 5 MR. FEE: Objection. 04:09  
 6 MS. MILLER-ZIEGLER: Objection. Calls for a 04:09  
 7 legal conclusion. 04:09  
 8 THE WITNESS: I don't know that. I don't 04:09  
 9 have an answer for you. 04:09  
 10 BY MR. NERCESSIAN: 04:09  
 11 Q. Do you have any understanding? 04:09  
 12 MS. MILLER-ZIEGLER: Objection. 04:09  
 13 MR. FEE: Objection. 04:09  
 14 MS. MILLER-ZIEGLER: Calls for a legal 04:09  
 15 conclusion. 04:09  
 16 THE WITNESS: No. 04:09  
 17 BY MR. NERCESSIAN: 04:09  
 18 Q. Are you aware of any request made to the 04:09  
 19 CBSC to make another part of the California Building 04:09  
 20 Standards Code, not the California Electrical Code, 04:10  
 21 available to the print disabled? 04:10  
 22 A. I know of one other occurrence. 04:10  
 23 Q. What happened there? 04:10  
 24 A. We referred that person to the model code 04:10  
 25 developer, and they helped the person requesting. 04:10  
 Page 189



1 Q. And who was the model code developer in that 04:10  
2 instance? 04:10  
3 A. The International Code Council. 04:10  
4 Q. And how did they help the person requesting 04:10  
5 access? 04:10  
6 A. I don't know. 04:10  
7 Q. Do you know whether the International Code 04:10  
8 Council required payment from the person requesting 04:10  
9 print disabled access? 04:10  
10 A. I do not know that. 04:10  
11 Q. Are you aware of any request made to the 04:10  
12 CBSC to make another part of the California Building 04:10  
13 Standards Code, again, not the California Electrical 04:10  
14 Code, available to the mobility impaired? 04:10  
15 A. I'm not aware of that, no. 04:11  
16 Q. Are you aware of a request -- strike that. 04:11  
17 Are you aware of a similar request made to 04:11  
18 the CBSC by any person requesting access who lacked 04:11  
19 sight? 04:11  
20 A. No, I'm not aware of that. 04:11  
21 Q. Are you aware of a similar request made to 04:11  
22 the CBSC by any person requesting access for any 04:11  
23 other accessibility related issue? 04:11  
24 A. No, I'm not aware of that. 04:11  
25 Q. During the last round of examination, do you 04:11  
Page 190

1 recall the distinctions raised between the National 04:11  
2 Electrical Code and the California Electrical Code? 04:12  
3 A. Yes, I remember the conversation, yes. 04:12  
4 Q. The NFPA, however, publishes the California 04:12  
5 Electrical Code only in an edition that contains the 04:12  
6 National Electrical Code with additions and 04:12  
7 strikeouts showing the California amendments; is that 04:12  
8 correct? 04:12  
9 MS. MILLER-ZIEGLER: Objection to form. 04:12  
10 THE WITNESS: That's not entirely a correct 04:12  
11 statement. 04:12  
12 BY MR. NERCESSIAN: 04:12  
13 Q. To what extent is it correct? 04:12  
14 MS. MILLER-ZIEGLER: Objection. 04:12  
15 THE WITNESS: The publisher publishes the 04:12  
16 California Electrical Code with -- you stated that 04:12  
17 with California amendments and strikeout, and that's 04:12  
18 not accurate. 04:12  
19 BY MR. NERCESSIAN: 04:12  
20 Q. Not "in strikeout." "And strikeouts." 04:12  
21 A. And strikeout, yes. 04:12  
22 Q. So I can rephrase. 04:12  
23 A. Okay. 04:12  
24 Q. I can restate the question. 04:12  
25 A. Okay. 04:13  
Page 191

1 Q. So the NFPA publishes the California 04:13  
2 Electrical Code only in an edition that contains the 04:13  
3 National Electrical Code with additions and 04:13  
4 strikeouts showing the California amendments; is that 04:13  
5 correct? 04:13  
6 MS. MILLER-ZIEGLER: Objection. Calls for 04:13  
7 speculation. 04:13  
8 THE WITNESS: That's all I'm aware of. 04:13  
9 BY MR. NERCESSIAN: 04:13  
10 Q. The NFPA does not publish the text that 04:13  
11 consists purely of the California Electrical Code; is 04:13  
12 that right? 04:13  
13 MS. MILLER-ZIEGLER: Objection. Form. 04:13  
14 THE WITNESS: I don't know whether they do 04:13  
15 or they don't. 04:13  
16 BY MR. NERCESSIAN: 04:13  
17 Q. Would you know if they did publish the 04:13  
18 California supplement as a standalone? 04:13  
19 MR. FEE: Objection. Calls for speculation. 04:13  
20 THE WITNESS: I don't know that. I would 04:13  
21 not know that. 04:13  
22 BY MR. NERCESSIAN: 04:13  
23 Q. Are you aware of any way someone can read 04:13  
24 the entire California Electrical Code without the 04:14  
25 strikeouts from the National Electrical Code that 04:14  
Page 192

1 aren't in the California code? 04:14  
2 MS. MILLER-ZIEGLER: Objection. 04:14  
3 THE WITNESS: I don't know. I'm not aware. 04:14  
4 BY MR. NERCESSIAN: 04:14  
5 Q. So you don't know of any way you can just 04:14  
6 see a clean copy of the California Electrical Code 04:14  
7 without red lines? 04:14  
8 A. I'm not aware of that. 04:14  
9 Q. Have you had any discussions with any 04:14  
10 representatives of NFPA? 04:14  
11 A. It's a broad question. 04:14  
12 Q. You can still answer it. 04:14  
13 A. Okay. 04:14  
14 Q. I'm asking for a broad answer. 04:14  
15 A. Yes. 04:14  
16 Q. And what types of discussions have you had 04:14  
17 with the representatives of the NFPA? 04:14  
18 A. One is about the periodical they mail out 04:15  
19 monthly that is their NFPA magazine, and it has 04:15  
20 articles in there that contain a variety of 04:15  
21 information about the NFPA standards, and I've spoken 04:15  
22 to the representative about specific articles that 04:15  
23 are in there. 04:15  
24 Q. What other conversations have you had with 04:15  
25 NFPA? 04:15  
Page 193

1 A. Just about the contract negotiations. 04:15  
 2 Q. And what was the substance of those 04:15  
 3 conversations? 04:15  
 4 A. Just the wording of the contract. 04:15  
 5 Q. Did you propose any edits to the NFPA that 04:15  
 6 they accepted to the contract? 04:15  
 7 A. Yes. 04:15  
 8 MS. MILLER-ZIEGLER: Objection. Asked and 04:15  
 9 answered. 04:15  
 10 THE WITNESS: But I don't know what they are 04:15  
 11 specifically. 04:15  
 12 BY MR. NERCESSIAN: 04:15  
 13 Q. Do you recall the subject matter areas you 04:15  
 14 proposed that as to the NFPA on? 04:15  
 15 MS. MILLER-ZIEGLER: Objection. Asked and 04:16  
 16 answered. 04:16  
 17 THE WITNESS: No, I don't recall. 04:16  
 18 BY MR. NERCESSIAN: 04:16  
 19 Q. Do you recall any other discussions with 04:16  
 20 representatives of the NFPA? 04:16  
 21 A. No. 04:16  
 22 Q. So other than discussions about the 04:16  
 23 newsletter and conversations consisting of contract 04:16  
 24 negotiations, you don't recall any other 04:16  
 25 conversations with the NFPA? 04:16  
 Page 194

1 A. Training. I have had conversations with 04:16  
 2 them about training that they make available 04:16  
 3 throughout the State. 04:16  
 4 Q. And what sort of training? 04:16  
 5 A. They make available training for the 04:16  
 6 California Electrical Code and also the NEC 04:16  
 7 throughout California. 04:16  
 8 Q. All right. What kind of trainings does the 04:16  
 9 NFPA hold with respect to the California Electrical 04:17  
 10 Code? 04:17  
 11 MR. FEE: Objection. This is beyond the 04:17  
 12 scope of cross. 04:17  
 13 THE WITNESS: Yeah. Just they offer 04:17  
 14 training, and they put a notice out there in local 04:17  
 15 jurisdictions, and people interested in the code 04:17  
 16 changes can attend that training, and they let our 04:17  
 17 office know about it. 04:17  
 18 BY MR. NERCESSIAN: 04:17  
 19 Q. Does CBSC provide any advice to the NFPA 04:17  
 20 with respect to the trainings regarding the 04:17  
 21 California Electrical Code? 04:17  
 22 A. No. 04:17  
 23 MR. FEE: Objection. Beyond the scope of 04:17  
 24 the cross. 04:17  
 25 BY MR. NERCESSIAN: 04:17  
 Page 195

1 Q. How do the -- are the trainings with respect 04:17  
 2 to the National Electrical Code -- strike that. 04:18  
 3 What kind of information does the NFPA 04:18  
 4 provide to the CBSC with respect to training 04:18  
 5 concerning the National Electrical Code? 04:18  
 6 MR. FEE: Objection. Beyond the scope of 04:18  
 7 the cross. 04:18  
 8 THE WITNESS: We're invited to the training. 04:18  
 9 BY MR. NERCESSIAN: 04:18  
 10 Q. Have you ever attended one of those 04:18  
 11 trainings? 04:18  
 12 MR. FEE: Same objection. 04:18  
 13 THE WITNESS: Years ago, I attended 04:18  
 14 training. 04:18  
 15 BY MR. NERCESSIAN: 04:18  
 16 Q. And for what purpose? 04:18  
 17 MR. FEE: Same objection. 04:18  
 18 THE WITNESS: Just to learn about the 04:18  
 19 National Electrical Code. 04:18  
 20 BY MR. NERCESSIAN: 04:19  
 21 Q. We discussed earlier about your knowledge or 04:19  
 22 awareness of the code development process among the 04:19  
 23 standards development organizations. Do you recall 04:19  
 24 that? 04:19  
 25 A. Yes. 04:19  
 Page 196

1 MS. MILLER-ZIEGLER: Outside the scope of 04:19  
 2 cross. Objection. 04:19  
 3 BY MR. NERCESSIAN: 04:19  
 4 Q. Are you aware that governments authorize 04:19  
 5 employees to participate in writing model codes? 04:19  
 6 MS. MILLER-ZIEGLER: Objection. That's 04:19  
 7 outside the scope of the cross. 04:19  
 8 THE WITNESS: I'm not aware of that. 04:19  
 9 BY MR. NERCESSIAN: 04:19  
 10 Q. Are you aware that government pays expenses 04:19  
 11 of those employees who participate in writing model 04:19  
 12 codes? 04:19  
 13 MS. MILLER-ZIEGLER: Objection. It's 04:19  
 14 outside the scope of the cross. 04:19  
 15 MR. FEE: Also calls for speculation. 04:19  
 16 THE WITNESS: I don't know. I'm not sure. 04:19  
 17 BY MR. NERCESSIAN: 04:19  
 18 Q. No further questions. 04:19  
 19 A. Okay. 04:20  
 20 MS. MILLER-ZIEGLER: We just have a few more 04:20  
 21 questions. We can probably just ask them from here. 04:20  
 22 MR. NERCESSIAN: Okay. 04:20  
 23 EXAMINATION 04:20  
 24 BY MS. MILLER-ZIEGLER: 04:20  
 25 Q. Just a couple more questions. 04:20  
 Page 197

1 Does the California Building Standards 04:20  
 2 Commission offer any education and outreach? 04:20  
 3 A. Yes, we do. 04:20  
 4 Q. Do you offer trainings related to the 04:20  
 5 Building Standards Code? 04:20  
 6 A. We offer trainings more specifically to the 04:20  
 7 process and then also for the California Green 04:20  
 8 Building Standards Code because we have authority to 04:20  
 9 amend that for nonresidential occupancies. 04:20  
 10 Q. You were asked about whether the NFPA holds 04:20  
 11 trainings related to the California Electrical Code. 04:20  
 12 Is there any reason -- are you aware of any other 04:20  
 13 organizations that hold trainings related to the 04:20  
 14 California Electrical Code? 04:20  
 15 MR. NERCESSIAN: Objection. 04:20  
 16 THE WITNESS: I don't know. 04:21  
 17 BY MS. MILLER-ZIEGLER: 04:21  
 18 Q. Can you think of any reason another 04:21  
 19 organization couldn't hold its own training about the 04:21  
 20 California Electrical Code? 04:21  
 21 MR. NERCESSIAN: Objection. 04:21  
 22 THE WITNESS: I'm not aware, no. 04:21  
 23 BY MS. MILLER-ZIEGLER: 04:21  
 24 Q. That's all we have. Thank you. 04:21  
 25 A. Okay. 04:21

Page 198

1 MR. FEE: I have no questions. 04:21  
 2 MR. NERCESSIAN: I have one followup 04:21  
 3 question within the scope of that. 04:21  
 4 EXAMINATION 04:21  
 5 BY MR. NERCESSIAN: 04:21  
 6 Q. What course materials, if any, does CBSC use 04:21  
 7 or provide in its trainings regarding the California 04:21  
 8 Electrical Code? 04:21  
 9 A. Well, we don't do training for the 04:21  
 10 California Electrical Code. It's just for the 04:21  
 11 process, the California Building Standards Code 04:21  
 12 process. 04:21  
 13 Q. So there are no course materials that CBSC 04:21  
 14 provides with respect to the California Electrical 04:21  
 15 Code? 04:21  
 16 A. No. 04:21  
 17 Q. Thank you. 04:21  
 18 A. Uh-huh. 04:21  
 19 MR. FEE: Done; right? 04:21  
 20 MS. MILLER-ZIEGLER: Yes. 04:21  
 21 MR. FEE: I have no other questions. 04:21  
 22 VIDEO OPERATOR: Off the record then. 04:22  
 23 THE REPORTER: What counsel want copies? 04:22  
 24 MR. FEE: Yes. 04:22  
 25 MS. MILLER-ZIEGLER: Yes. 04:22

Page 199

1 MR. YEN: No. 04:22  
 2 THE REPORTER: And do you want roughs? 04:22  
 3 MR. FEE: I don't need one. 04:22  
 4 MR. YEN: Actually, can you give me one 04:22  
 5 minute? 04:22  
 6 MS. EHLEER: When would your rough be 04:22  
 7 available? 04:22  
 8 THE REPORTER: Tonight. 04:22  
 9 MS. EHLEER: We'll take a rough. 04:22  
 10 MR. NERCESSIAN: We'll take a rough. 04:22  
 11 MR. YEN: We don't need it. 04:22  
 12 VIDEO OPERATOR: We're off the record. It's 04:22  
 13 4:22. 04:22  
 14 (Discussion off the record) 04:22  
 15 MR. YEN: We're fine. 04:23  
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Page 200

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 9  
 10 I, MIA D. MARVELLI, do hereby declare under  
 11 penalty of perjury that I have read the foregoing  
 12 transcript; that I have made any corrections as  
 13 appear noted, in ink, initialed by me, or attached  
 14 hereto; that my testimony as contained herein, as  
 15 corrected, is true and correct.  
 16 EXECUTED this \_\_\_\_ day of \_\_\_\_\_,  
 17 20\_\_\_\_, at \_\_\_\_\_,  
 18 (City) (State)  
 19  
 20  
 21 \_\_\_\_\_  
 22 MIA D. MARVELLI  
 23  
 24  
 25

Page 201

<p>1 I, the undersigned, a Certified Shorthand 2 Reporter of the State of California, do hereby 3 certify: 4 That the foregoing proceedings were taken 5 before me at the time and place herein set forth; 6 that any witnesses in the foregoing proceedings, 7 prior to testifying, were duly sworn; that a record 8 of the proceedings was made by me using machine 9 shorthand which was thereafter transcribed under my 10 direction; that the foregoing transcript is a true 11 record of the testimony given. 12 Further, that if the foregoing pertains to 13 the original transcript of a deposition in a Federal 14 Case, before completion of the proceedings, review of 15 the transcript [ ] was [ ] was not requested. 16 I further certify I am neither financially 17 interested in the action nor a relative or employee 18 of any attorney or party to this action. 19 IN WITNESS WHEREOF, I have this date 20 subscribed my name. 21 Dated: August 24, 2019 22 23 24 <u>Carrie Pederson</u> 25 CARRIE PEDEKSON, CSR No. 4373</p> <p style="text-align: right;">Page 202</p>	

[& - 3]

<b>&amp;</b>	<b>141</b> 7:17	<b>2012</b> 20:15	77:4 142:23 143:9	
<b>&amp;</b> 3:4,13 4:5,14 7:5 9:2,5,14,17	<b>15</b> 49:15 83:15 103:14 145:11	<b>2013</b> 37:21 78:11 78:16,25 79:7,12 79:18	143:17,24 144:6 202:21	
<b>0</b>	<b>150</b> 7:19	<b>2014</b> 44:4 110:4,5 168:9 172:7,8,11 172:21,23 173:3,6	<b>202</b> 1:25	
<b>01215</b> 1:7 2:7	<b>16</b> 49:16 83:16 103:15	<b>2015</b> 139:1	<b>202-220-1115</b> 3:10	
<b>1</b>	<b>160</b> 6:8	<b>2016</b> 7:11,15 20:7 22:22,25 36:5,10 37:2,14,18 44:1 53:5,7,10,17,21,25 54:3,10,13,21,25 55:6,13,19 56:2,9 71:19,22,25 73:16 77:9,11,25 78:6 84:4,7,19 86:3 87:22 94:17 99:8 99:14 100:11,22 110:7 112:12,19 131:4,17,18 132:3 132:4 133:2,7,10 135:11,21 138:22 139:10,16 140:2 150:15 151:4,25 154:6 155:5 157:2 157:12,14 158:10 167:21,21 170:8,9 170:13,19 171:24 172:3,6,9,12 175:14,14,15 187:4,13,18	<b>2017</b> 43:22 44:21 139:19	<b>2020</b> 23:6 36:2
<b>1</b> 1:25 7:4,15 24:9 24:10,13 36:20 47:5,12,19 48:15 49:1 64:5 83:1 103:1 123:10 134:21,21,24 140:14 172:19	<b>16th</b> 172:3	<b>2018</b> 144:3	<b>21</b> 49:21 83:21 103:21	
<b>1-1</b> 139:24	<b>17</b> 49:17 83:17 103:16 139:25	<b>2019</b> 1:19 2:23 7:4 7:8 8:1,13 23:4 35:23 36:4,11,14 43:14,16 44:15 53:6 59:2,6,17 60:9,15,22 76:18	<b>213-683-9240</b> 3:19	
<b>1-1-17</b> 140:1	<b>18</b> 49:18 83:18 103:18		<b>22</b> 49:22 83:22 103:22	
<b>10</b> 7:11,19 49:10 83:10 103:9 145:11 150:20,23 151:12	<b>180</b> 131:10,11		<b>22:15</b> 161:13	
<b>1034</b> 62:18 64:4 74:6	<b>186</b> 6:9		<b>23</b> 49:23 83:23 103:23	
<b>107</b> 7:13	<b>18930</b> 29:19		<b>24</b> 7:4 14:6,7,7,10 14:10 19:19 35:4 35:6,23 36:15 37:15,18 41:19,22 41:25 42:11,18 43:5 47:6,12,20 48:15 49:24 83:24 89:11,13,20,22 90:4 93:18 103:24 115:12 134:15 154:7 182:6 202:21	
<b>11</b> 49:11 62:18 83:11 103:10	<b>19</b> 1:19 2:23 7:4 8:1 37:20 49:19 58:3 60:6 77:8 83:19 103:19		<b>240</b> 2:21	
<b>110</b> 65:19 66:6,12	<b>197</b> 6:10		<b>24th</b> 14:12 89:15	
<b>1111</b> 4:8	<b>199</b> 6:11		<b>25</b> 49:25 82:24 83:25 103:25	
<b>11344</b> 89:6	<b>19th</b> 8:13		<b>263332</b> 176:6	
<b>1155</b> 3:7	<b>1:13</b> 1:7 2:7		<b>27th</b> 99:11	
<b>12</b> 35:4 49:12 83:12 103:11	<b>1st</b> 23:6 35:25 36:2 131:4,18 132:4 133:7,10 135:21 139:16,19 170:8		<b>28</b> 14:12,14	
<b>12-16-2016</b> 85:18	<b>2</b>		<b>28th</b> 84:7	
<b>12th</b> 4:19	<b>2</b> 7:6 33:3 34:15 49:1 83:1 103:1 113:11 153:18		<b>3</b>	
<b>13</b> 49:13 83:13 103:12	<b>2.5</b> 93:17,18,20 180:25 181:6		<b>3</b> 7:7 34:18,21 36:23 43:4 49:2 83:2 103:2 154:7 181:20	
<b>1300</b> 5:10	<b>20</b> 49:20 83:20 103:20 201:17			
<b>132</b> 7:15	<b>200</b> 135:19,23			
<b>14</b> 13:22 49:14 83:14 103:13 165:2,5	<b>2000</b> 146:12			
	<b>20004-1361</b> 3:9			
	<b>20004-2541</b> 4:9			
	<b>2011</b> 79:2			

[32 - adopt]

<p><b>32</b> 176:11  <b>33</b> 7:6  <b>34</b> 7:7  <b>3465980</b> 1:24  <b>350</b> 3:16  <b>3:08</b> 145:18  <b>4</b>  <b>4</b> 7:8 49:4 57:22  57:25 82:3 83:4  103:3 109:13,14  <b>4373</b> 1:23 2:24  202:25  <b>45</b> 45:19  <b>49</b> 64:3  <b>5</b>  <b>5</b> 7:9 49:5 83:5,6  98:25 103:4 113:2  113:11  <b>506-6671</b> 180:24  <b>50th</b> 3:17  <b>555</b> 4:18  <b>57</b> 7:8  <b>6</b>  <b>6</b> 7:11 49:6 83:6  85:10,13 87:15,16  103:5 115:7  116:23 180:19  <b>625</b> 159:4,5  <b>625.1.1</b> 159:6  <b>650-335-7281</b> 4:21  <b>6995</b> 202:24  <b>7</b>  <b>7</b> 7:13 49:7 74:6,8  74:9 83:7 103:6  107:10,11,13  131:1 134:20  145:21 167:17  169:24 175:11  186:11</p>	<p><b>70</b> 43:7,8,10 44:6  168:9 172:20  <b>70-567</b> 159:5  <b>7th</b> 3:8 99:11  <b>8</b>  <b>8</b> 6:7 7:15 49:8  83:8 103:7 132:10  132:11,14  <b>8-1-2016</b> 132:24  <b>818</b> 180:24  <b>83</b> 7:9  <b>85</b> 7:11  <b>9</b>  <b>9</b> 7:17 49:9 83:9  103:8 141:20,21  141:24  <b>90071-3426</b> 3:18  <b>916-210-7836</b> 5:12  <b>94104</b> 4:20  <b>95814</b> 5:11  <b>9th</b> 99:8  <b>a</b>  <b>a.m.</b> 2:22 8:2,13  <b>abbreviation</b> 89:7  <b>ability</b> 91:21  <b>able</b> 12:20 32:25  102:8 124:1  174:10,15  <b>accepted</b> 64:15  194:6  <b>access</b> 54:25 55:12  55:19 56:2,8 64:1  67:7,9,15,17 68:2  68:5 69:21 70:12  70:17,18 72:11  73:9 89:24 91:21  92:6,10 93:14  94:8,22,23 95:5,6  95:11,15 96:10,14  120:8,11,25 121:4</p>	<p>123:2,3 131:25  132:2 133:13,16  133:24,25 141:11  173:11 174:16  179:10 181:3  190:5,9,18,22  <b>accessed</b> 59:2,17  72:25  <b>accessibility</b>  124:15 138:5,13  180:16 190:23  <b>accessible</b> 37:6  55:6 134:7  <b>accessing</b> 58:24  91:1,12 92:19  120:3  <b>accomplish</b> 30:17  <b>accuracy</b> 104:21  <b>accurate</b> 12:21  41:15 94:14 99:17  104:25 117:5  170:15 184:1  191:18  <b>acknowledgments</b>  74:7  <b>acquisitions</b>  151:20  <b>acronym</b> 66:11,21  168:3  <b>act</b> 14:3 18:22  45:5  <b>action</b> 7:10 8:22  14:22,23 15:8  18:1 22:10,12  29:1,14 46:3,13  84:21 104:14  130:16 202:17,18  <b>actions</b> 15:1,7  26:18 28:23 29:4  29:11 48:4 98:5  128:17,21 129:10</p>	<p>129:16,25 130:4,7  130:11,20 169:21  170:25  <b>activities</b> 47:25  <b>activity</b> 139:18  <b>actual</b> 157:17  <b>adapted</b> 41:8  <b>add</b> 183:22  <b>added</b> 183:18,18  <b>addition</b> 147:12  <b>additional</b> 45:16  45:22 120:8,25  160:21  <b>additions</b> 191:6  192:3  <b>address</b> 12:7 41:8  124:9  <b>addressed</b> 84:17  <b>addresses</b> 124:7  124:13  <b>adequately</b> 166:24  <b>administer</b> 13:24  14:4 16:21  <b>administered</b> 8:5  35:16  <b>administering</b>  14:16 19:19 21:11  21:19  <b>administers</b> 13:21  <b>administrative</b>  14:3 18:21 36:21  45:5,21 47:5,13,20  47:24 48:7,17  89:7,18,21,23  <b>adopt</b> 28:13,14  40:16 41:22 44:19  64:10 67:5 68:10  68:13,17 103:24  111:17,17 115:11  116:10,17 165:20  165:25 167:12</p>
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[adopted - appeals]

<p><b>adopted</b> 40:23                  41:5,7,19,22,25                  42:10,18 50:2                  64:15 65:5,12                  67:8,10,17 69:19                  106:12 115:15                  116:6 134:18                  182:6,16 183:6  <b>adopting</b> 152:8  <b>adoption</b> 21:12,19                  22:6 30:6,16                  45:12 49:9,14,18                  49:23 50:12,20                  64:6,8 105:8,14                  106:24 116:9                  138:23 139:2  <b>adoptive</b> 115:14  <b>adopts</b> 66:11  <b>advertise</b> 159:24  <b>advertising</b> 159:13                  159:21  <b>advice</b> 195:19  <b>advisory</b> 45:8                  46:22,24 47:4,9                  48:19  <b>agencies</b> 14:19                  15:23 19:15,18                  21:23 29:17 40:15                  44:19,22 45:23                  47:14 48:1,19                  64:10 74:14,20                  75:6,15,17 76:16                  76:18 77:25 78:4                  78:22 79:17,21                  103:24 104:9,15                  111:17 117:11                  127:19,23 128:3                  134:18 140:18                  141:10 159:24                  160:2 169:10,16                  170:7 175:21</p>	<p>176:3 182:16,22                  183:6,16 186:15                  186:25 187:2,9,12                  187:15,17,22,24                  188:1  <b>agency</b> 15:24,24                  17:22 45:14,16,16                  46:11 68:9,12,16                  69:15 74:2 75:2                  105:5 115:11                  116:9,16 117:1,14                  117:21 118:1,7                  127:18 128:23                  183:11  <b>ago</b> 24:17 83:14                  99:19 100:19                  108:16 110:21                  143:25 144:1                  145:2 196:13  <b>agree</b> 73:8 123:15                  123:17 164:18,23  <b>agreement</b> 7:14,20                  107:17 108:3,6,19                  115:22,25 116:2                  116:13 134:21                  140:7,23,25 151:9                  167:21 171:24                  172:1,2,22 173:4,5                  175:13 176:18                  177:2 187:4  <b>agreements</b>                  167:16  <b>ahead</b> 155:11                  175:3  <b>air</b> 1:8 2:8  <b>al</b> 8:16  <b>alex</b> 87:21 132:21  <b>alexander</b> 7:16  <b>allow</b> 11:24                  110:10</p>	<p><b>allowed</b> 11:23                  112:6 164:1  <b>allowing</b> 111:20  <b>allows</b> 64:14 112:3                  112:11,19  <b>alphabetical</b>                  140:12  <b>ambiguous</b> 106:3  <b>amend</b> 15:5,8,9                  29:7 30:15 35:9                  64:10 76:2 78:23                  102:13 184:17                  198:9  <b>amended</b> 29:4                  64:15 67:5,6,8,11                  67:18,21,23 68:10                  68:13,17 69:14,20                  75:22  <b>amending</b> 30:5  <b>amendment</b> 46:18                  62:24 76:6,7                  159:8,11 170:22                  183:17  <b>amendments</b>                  40:14 41:10,12                  43:9 44:22,24                  62:20 63:14,19,23                  70:11 75:3,16                  80:22 81:7,21                  102:9,15 144:25                  162:7,12,14 169:4                  169:16 171:12,13                  171:15 182:15,22                  183:5,11,17,21                  184:10,16 191:7                  191:17 192:4  <b>american</b> 1:4,7 2:4                  2:7 4:3 8:15  <b>amount</b> 108:18                  126:15,16 152:7                  155:24</p>	<p><b>analysis</b> 103:23  <b>andrew</b> 4:16 9:4  <b>anercessian</b> 4:22  <b>angeles</b> 3:18  <b>annotation</b> 33:8  <b>annotations</b> 34:16  <b>answer</b> 11:12,20                  22:16 23:24 26:16                  27:3 31:18 32:10                  32:23,25 42:21                  43:19 50:24 56:23                  57:16 64:21,24                  65:25 69:25 70:1                  70:3 96:3 109:5                  111:24 116:21                  119:20 124:1                  126:5,6 127:2                  138:8 148:5 149:5                  149:22 155:8                  158:16 166:15,16                  172:14 189:9                  193:12,14  <b>answered</b> 71:7                  72:13 73:6 80:6                  194:9,16  <b>answering</b> 16:8                  56:16 148:18                  153:4  <b>answers</b> 12:5,21  <b>anybody</b> 48:18                  53:24 57:1 77:21                  95:2 145:25 147:3                  147:15  <b>apart</b> 155:4,17                  156:1  <b>apologies</b> 109:14  <b>apologize</b> 15:5                  70:6 120:13,18                  128:23  <b>appeals</b> 24:23                  47:25</p>
---	--	---	---

[appear - available]

<p><b>appear</b> 32:19 34:9 54:24 68:21,24 69:1 85:20 133:15 201:13</p> <p><b>appearances</b> 3:1 4:1 5:1</p> <p><b>appears</b> 33:16 34:23 55:7,12 58:3 69:14 89:5 98:19 99:7 107:17 154:21 155:24 176:16</p> <p><b>appendices</b> 115:10</p> <p><b>applicable</b> 106:6</p> <p><b>application</b> 47:1 73:24</p> <p><b>applied</b> 182:9</p> <p><b>applies</b> 42:24 51:6 135:12</p> <p><b>apply</b> 41:25 42:1,6 42:8,11,15,19 104:15 106:24</p> <p><b>appointed</b> 16:2,14 16:17,25 17:6</p> <p><b>appointments</b> 17:9</p> <p><b>appropriate</b> 100:10 106:8</p> <p><b>approval</b> 21:12 22:2,7 106:17</p> <p><b>approve</b> 14:22,25 15:3,5,8,9,9 29:4 29:14 46:14</p> <p><b>approved</b> 22:18 29:19 65:1</p> <p><b>approves</b> 14:21 29:7 30:13 171:17</p> <p><b>approving</b> 29:9 145:22 146:25 170:25</p>	<p><b>approximately</b> 20:6 47:7</p> <p><b>arbitrary</b> 29:24 105:19</p> <p><b>architect</b> 20:14,22 20:24 21:18 66:15 128:14 129:1,3,6 129:11</p> <p><b>architectural</b> 20:13,16,24 21:17 23:16,18 78:20 118:11 119:4</p> <p><b>archive</b> 33:6,8,9 33:12,22</p> <p><b>area</b> 178:22 179:5</p> <p><b>areas</b> 160:20 194:13</p> <p><b>armen</b> 4:15 9:1 39:12</p> <p><b>article</b> 64:10 65:19 66:5,12 67:5 68:10,13,17 159:4 159:5</p> <p><b>articles</b> 64:12 67:7 67:10,17 193:20 193:22</p> <p><b>articulating</b> 104:11</p> <p><b>aside</b> 135:16 153:20 154:2,10 154:25 155:3 158:1,8</p> <p><b>asked</b> 12:17 56:22 71:6 72:12 73:5 121:20 168:12 173:25 174:4 177:16 179:21 182:8,10,13 194:8 194:15 198:10</p> <p><b>asking</b> 11:12,18 39:17 52:15 64:19</p>	<p>71:13 77:19 80:10 81:17 96:4 98:9 154:14 157:16,24 157:25 193:14</p> <p><b>assembled</b> 22:18 45:7 46:25</p> <p><b>assembles</b> 20:2 45:19</p> <p><b>asserted</b> 77:1,4,13 79:7,11,18,22 80:2 80:14 81:4,19</p> <p><b>associate</b> 20:13,14 20:17,21,23,24 21:10,17,18 23:16 23:18 78:20 118:12</p> <p><b>associated</b> 33:14</p> <p><b>association</b> 1:6 2:6 3:3 7:25 9:15,18 44:8,10 62:3 107:20 134:12 160:20 168:2</p> <p><b>assume</b> 164:3</p> <p><b>astm</b> 1:5 2:5 4:4 9:20</p> <p><b>attach</b> 86:25</p> <p><b>attached</b> 201:13</p> <p><b>attachment</b> 83:22 98:24,25 99:4 136:2,3 138:21 175:18,20 176:1,2 176:6,9,10,10,23 177:7,8,10,11,14 178:4 186:22,24</p> <p><b>attachments</b> 83:19 136:7,9 187:21</p> <p><b>attempted</b> 60:4,6 174:7</p> <p><b>attend</b> 195:16</p> <p><b>attended</b> 196:10 196:13</p>	<p><b>attention</b> 64:2 74:5 87:13 88:1 88:12 109:13 113:3 115:7 116:23 123:9 130:25 132:25 134:19,20 138:20 140:6,13 151:12 153:19 154:5</p> <p><b>attorney</b> 3:6,15 4:7 5:7,9,16 9:7 84:25 108:14 202:18</p> <p><b>attorneys</b> 4:17</p> <p><b>audible</b> 11:5</p> <p><b>audience</b> 48:14</p> <p><b>august</b> 1:19 2:23 7:15 8:1,13 133:7 133:10 202:21</p> <p><b>authenticate</b> 157:16,21,22,25</p> <p><b>authenticity</b> 34:2 153:24 154:20 158:2,10,22</p> <p><b>authority</b> 17:8 67:4 127:24 198:8</p> <p><b>authorize</b> 197:4</p> <p><b>authorized</b> 41:11 115:11 117:1</p> <p><b>automatically</b> 175:14</p> <p><b>available</b> 33:12 38:18,22 48:18 51:18 52:8,21,24 54:14,16 63:6,15 63:25 67:19 70:14 70:24 71:15 117:2 117:5,20,22,25 121:5,8,14 122:5 126:18 131:22 132:3 133:13,16</p>
---	---	---	---



[available - building]

133:24 138:1,5,12 139:3,3 140:17 141:2,6,7 170:6 173:23 174:22,24 175:5,7 179:23 180:1,8,12,16 188:12,17,19 189:21 190:14 195:2,5 200:7 <b>avenue</b> 3:16 4:8 <b>aware</b> 25:9 39:18 54:9,18 55:5 59:20,23,25 60:2,2 60:8 72:10 74:19 75:24 76:15,17,25 77:3,12,21,24 79:6 79:17,21 80:1,13 81:3 82:14 90:4 90:17,20,25 92:10 94:3,5,18 95:2,3 95:10,14,21 99:22 118:6 121:3,25 122:21,23 125:12 126:8 127:19 129:10 131:16 133:6 135:6,15 138:11 141:1 144:24 147:16 150:3,8,12 153:8 159:20,23 160:1 171:4,11,16 179:10,14,24 180:4,6,10,14 187:11 188:13,18 189:18 190:11,15 190:16,17,20,21 190:24 192:8,23 193:3,8 197:4,8,10 198:12,22 <b>awareness</b> 72:22 77:19 78:4,9	81:18 126:20 196:22 <b>awhile</b> 143:25 <b>b</b> <b>b</b> 1:5 2:5 4:4 98:25 99:4 115:7 136:3 140:6,14 175:20 176:2,23 177:10 177:11 178:4 186:24 <b>back</b> 49:5 83:1 84:4 86:14 87:22 98:24 103:19 130:25 134:19 144:21 145:17,20 149:7 153:18 160:14 169:24 171:25 175:7 177:13 186:6 <b>bad</b> 149:8 <b>banner</b> 159:7 <b>barbu</b> 5:16 9:9,9 <b>barely</b> 139:24 <b>based</b> 29:12 43:6 43:17 44:2 79:1 105:22 116:12 168:15 175:24 <b>basis</b> 29:17 111:18 <b>bsc</b> 19:22 <b>beginning</b> 2:22 <b>begins</b> 170:1 182:1 <b>behalf</b> 2:20 9:14 9:17,20 <b>believe</b> 29:19 37:7 61:9 76:2 79:2 86:4,7 94:16 104:18 107:10 141:20 145:24 155:18 173:8 <b>benefit</b> 18:25 105:23	<b>benny</b> 146:8,19 147:18,22 148:9 <b>best</b> 29:22 105:16 <b>beyond</b> 131:10 195:11,23 196:6 <b>bid</b> 142:8,10,23 143:17,24 144:6 <b>bids</b> 142:13 <b>binders</b> 154:15 <b>bit</b> 161:5 162:18 173:10 <b>blank</b> 98:16 <b>blend</b> 40:17 <b>blurb</b> 41:15 <b>blurry</b> 139:7 <b>bni</b> 7:20 53:5,15 53:17,18 54:4,11 54:13,22 56:7,25 57:1,8,18 70:19 71:20 72:1 73:17 73:23 74:1 77:20 81:12 96:11 101:8 114:20 151:10 <b>board</b> 130:19 <b>bockius</b> 4:5 <b>bodies</b> 182:17 183:13 <b>body</b> 32:20 88:2 <b>bottom</b> 35:11 85:17 107:21 116:24 176:6 178:5,11 <b>break</b> 12:9,11 33:24 48:23 82:20 99:2 102:17 104:19 145:11 <b>bridges</b> 4:16 9:4,4 <b>bringing</b> 104:13 <b>broad</b> 32:4 80:16 108:1 112:5 122:12,16 124:1	125:1,16 126:2 127:1 128:11 144:16 147:25 185:8 193:11,14 <b>broadly</b> 80:10 <b>broken</b> 91:18,22 92:1 179:17 <b>bsc</b> 19:6,22 20:10 35:14,21 37:3,6,11 37:18 55:7,13 60:21 71:4,15 72:4 73:1,3 92:22 93:12 101:12 102:1,5,20 103:2,6 139:3 149:7 159:6 180:25 <b>bsc's</b> 102:19 <b>budget</b> 19:23 <b>buff</b> 114:4 <b>build</b> 51:15 <b>builder</b> 125:22 <b>building</b> 5:3 7:23 9:8,11 13:17,19,22 14:1,9 16:16,18 17:10 19:3,8 21:13,20 22:2,7,11 23:8,9,20 24:4 26:9,11,25 27:12 27:19,23 28:8,16 28:17,23 29:6,18 30:4 31:22 34:25 35:22 36:5,10 37:2,10 38:22 39:16,21,22 40:8,9 40:11,13 41:4,6,10 45:3,5,18 47:2 51:16,17 52:20,23 52:24,25 54:19 63:13,24 67:15 73:25 75:18 84:21 99:12,22 100:20
--	---	--	---

[building - calls]

101:3,18 102:14	5:3,5,11,17 7:8,13	95:19 96:1,9,20,25	191:7,16,17 192:1
102:23 104:10,12	7:19,23 8:1,19 9:6	97:3,7,11,15,20,23	192:4,11,18,24
104:22,23 105:2,8	9:8 13:22 14:1,9	98:3,5,13,18 99:13	193:1,6 195:6,7,9
105:15,18,23	14:13,13 17:10	99:24 100:11,22	195:21 198:1,7,11
106:2,11,15 107:5	19:9 21:13,20	101:4,13,20 102:2	198:14,20 199:7
107:19 111:16	23:7,9,20 24:4	102:13,13 103:1,5	199:10,11,14
117:9 119:5	28:13,14 30:4	103:6 107:5,19	202:2
121:17 122:15,17	31:21 32:20 34:12	112:8,12,20 116:5	<b>california's</b> 22:2,7
122:22 123:2	34:25 36:5,10,20	117:3,7,15,16	41:9 171:22
126:21 127:15,17	36:23 37:2,10	118:2,8 121:8	<b>call</b> 47:1 64:2
127:20 128:9,12	38:20,21 39:14,15	127:5,10,15,17,20	87:13 88:1,12
128:15,22 129:7	39:18,20 40:8,9,12	128:15,22 129:7	93:10 103:12
129:17,21 130:1,8	40:14,15 41:10,11	129:17 130:1,6,8	109:13 113:3
130:12,17,21,23	41:18 42:1,17,25	130:10,12,15,17	115:6 116:23
131:12 133:2	43:5,6,9,16 44:1	130:21 131:17,21	123:9 130:25
142:24 144:8,13	44:15 46:6 47:5	132:3 133:9,12,21	132:25 134:19,20
151:17 158:24	47:13,20,23 48:7	133:22 135:11	138:20 140:6,13
159:7,17 161:4	50:2 51:6,14,15,17	136:19 138:4,9	149:1 151:12
163:8,13 164:6	51:24 52:7,7,12,13	140:2 142:24	153:19 180:24
165:17 166:4	52:22 53:4,10,22	144:8,12,24,25	<b>called</b> 38:2 45:7
183:13 184:20	53:25 54:3,10,18	151:16 154:6,7,22	113:23 122:13
185:2,4,13 189:19	55:1,19 56:2,9	155:5,19 156:3,20	136:10,11
190:12 198:1,5,8	58:3 59:2,18 60:5	156:23 157:2,5,13	<b>calling</b> 153:25
199:11	60:9,15,22 61:18	157:14,20 158:11	<b>calls</b> 50:21 51:10
<b>buildings</b> 23:14	62:12,14,20,24	158:20 159:11,14	55:14 57:3 58:21
24:1 42:6,15	63:14,16,22,23	159:21,24 160:2	62:8 67:12 69:7
118:13,19 119:14	64:6,20 66:7	161:4 164:5,19	69:22 70:13,20
124:21,22,23	69:11 70:10 72:17	165:5,16 166:4,18	71:21 72:18 75:9
125:4 128:16	72:23 73:9,18,22	168:14,18,25	76:13,21 77:14
129:4,8,13,22	73:24 74:3,12,21	169:4,7,11,17	82:8 84:11 86:10
182:9 184:14	75:3,7,18,23 76:2	170:6,22 171:1,5	88:24 90:14 91:3
<b>built</b> 119:14	76:7,10,19 77:1,4	171:13,13,15,17	91:13,16 92:18
123:13,21 124:4	77:9,11 78:1,6,11	177:18 178:23	95:20 96:2,22
124:24	78:16,23 79:1,8,12	179:11,18,22	97:8,16,25 99:18
<b>bureau</b> 127:10	79:19,23 80:3,15	180:7,11,15 181:9	100:24 101:15
<b>c</b>	80:18,19,22 81:6,6	181:17 182:5,21	103:8 106:25
<b>c</b> 138:21 140:8	81:20,22 82:6,12	184:6,9,18,20	109:2,21 110:11
<b>ca</b> 62:23	82:15 89:10,15,19	185:2,14 187:13	111:2,9,22 112:13
<b>cacacac</b> 159:10	89:25 90:5,6,12,21	187:18 188:12,20	112:23 116:19
<b>california</b> 1:18	91:2,11 92:5,11	189:2,3,19,20	118:3,21 119:6,18
2:21 3:18 4:18,20	93:21,22 95:12,16	190:12,13 191:2,4	121:10 125:25

[calls - code]

126:11,12,22,24 127:7 132:5 133:17 137:2 142:14 144:15,19 146:2 149:19,25 162:4 163:5 179:17,18 189:6 189:14 192:6,19 197:15 <b>capacity</b> 10:11 118:12 119:4 <b>capitol</b> 2:21 8:18 <b>capricious</b> 29:24 105:19 <b>carl</b> 152:24 153:9 <b>carrie</b> 1:22 2:23 202:25 <b>carried</b> 67:24 68:3 69:2 <b>carry</b> 44:22 <b>case</b> 1:6 2:6 13:5 25:19,22,25 33:1 44:10,20 53:3 68:1,3,20 69:5,10 69:12,13 77:8 115:6 202:14 <b>cases</b> 31:25 32:2,7 44:23 92:16,18 <b>categories</b> 41:14 <b>cause</b> 155:18 <b>caution</b> 84:24 88:14,17 108:13 <b>cbsc</b> 7:16 19:4 35:6 37:1,9,17 44:14 85:23,24 86:2,8 87:1,4,8,10 90:10,13,18,22 91:10,20 92:10 94:5,21 95:4 103:23 109:20 110:2,10,24 111:7	111:14,20 113:6 113:15,18 114:8 114:11,17,22,22 115:11 116:2,4 123:1 135:1,4,20 137:19,22,25 145:21 146:5,15 151:10 161:3,15 164:4,19 166:12 166:12 170:9 175:22 177:2 179:16,22,25 180:6,10,14 181:22 186:15,25 187:12,17,24 189:19 190:12,18 190:22 195:19 196:4 199:6,13 <b>cbcs's</b> 113:7 <b>cec</b> 106:24 110:7 164:7 166:22 167:5,22 170:9,13 170:19,22 172:6 173:11,12,16,18 174:1,5,10,21 175:14,14,15 176:19 179:6 <b>certain</b> 27:8 37:12 124:23,24 126:15 126:16 148:7 179:23 <b>certainly</b> 16:9 <b>certified</b> 2:24 202:1 <b>certify</b> 202:3,16 <b>cg</b> 159:6 <b>chance</b> 16:8 <b>change</b> 18:23 21:4 21:7 29:9 35:8 40:24,25 41:5 57:16	<b>changes</b> 45:1,12 45:17,17 113:5,24 148:10 163:9 195:16 <b>chapter</b> 64:5 <b>chapters</b> 115:9 <b>characterize</b> 94:10 <b>charges</b> 141:9,10 <b>chart</b> 138:25 <b>choice</b> 117:18 <b>choices</b> 117:20 <b>choose</b> 117:11,12 167:12 <b>chooses</b> 30:15 <b>circumstances</b> 113:22 <b>cited</b> 88:23 <b>cities</b> 122:11 <b>citizen</b> 189:2 <b>citizens</b> 123:13,22 124:5 <b>city</b> 122:18 177:22 177:25 178:5,9,12 178:15,18 201:18 <b>civil</b> 7:10 <b>claimed</b> 168:14 <b>claiming</b> 33:21,23 168:16,24 169:3 <b>clarification</b> 11:13 58:12,13,15 <b>clarify</b> 39:12 40:1 80:24 96:8 168:15 <b>clarity</b> 148:1,7 <b>clean</b> 193:6 <b>clear</b> 52:14 80:18 188:13 <b>clicking</b> 123:6 <b>client</b> 84:25 <b>clip</b> 102:8,11 <b>closest</b> 122:1 177:17	<b>code</b> 7:8,19 14:2,4 14:9,13 17:11,19 18:21,23 20:1 22:20,21,22 23:2 24:4 27:25 28:3 29:7,20,24 31:4,7 31:12,20,22,23 32:15,19,20,24 34:12 35:10 36:5 36:10,21,24 37:3,6 37:8,11,19,20 38:1 38:9,11,22 40:8,10 40:13 43:5,6,11,13 43:15,16,23 44:1,2 44:4,15,20,21 45:8 45:12,17 46:6,22 47:4,5,8,13,21,24 48:17,17,19 49:20 50:1,4,10 51:8,18 51:25 52:8,22 53:4,10,17,22,25 53:25 54:3,10,14 55:1,7,13,20 56:3 56:9 58:3 59:3,7 59:18,20 60:5,7,10 60:15,22 61:18,23 62:13,14,20,25 63:16 64:9,11,14 64:20 65:3,10,11 65:20,25 66:6,8 67:9,16,25 68:4 69:6,14 70:9,15,25 71:9,19,23 72:17 72:24 73:10,16,18 73:24 74:12,21 75:3,8,11,18,23 76:3,11,19 77:2,5 77:6,10,12 78:1,6 78:12,17,23 79:1,4 79:8,12,19,24 80:3 80:15,20 81:6,23
--	--	--	--

[code - commissions]

82:6,12,15 88:14 88:18,22 89:5,10 89:13,15,19,25 90:5,7,13,21 91:1 91:2,12,12,17 92:5 92:11,19 93:12,14 93:20,21,23,24 94:8,22 95:5,6,12 95:16,19 96:1,21 97:1,4,7,12,15,20 97:23 98:4,6,12,14 98:19,20 99:14,24 100:11,22 101:5 101:10,13,20 102:3,6,9,10,25 103:1,7,25 111:8 111:11,14,18,21 111:21 112:7,12 112:20 113:25 114:2,3,5,12 115:13,21 116:5,8 116:17,18 117:6 117:10,12,15,16 117:21,24,25 118:1,2,7,8,20,25 119:1,4,13,16,23 120:6,7,12,17,20 120:25 121:8,14 121:23 122:2,5,22 123:2,12,20 124:4 124:7,9,12,23 125:3,14,24 126:10 127:6 131:4,7,18,22 132:3 133:2,10,12 133:22 134:1,7,17 134:18 135:11,20 136:18,24 137:6 137:13,20,22 138:1,4,12,22 139:2 140:3,17	141:4,5,11 150:18 152:1 154:6,7,22 155:6,19 156:3,11 156:12,20,23 157:2,5,13,14,20 158:6,11,20 159:1 159:14,21,24 160:2 161:4 162:7 162:14,20,24,25 163:8,9,10,13 164:5,6,20,21 165:6,11,18,21 168:3,9,13,14,17 168:18,25 169:8 169:12,17,22 171:2,6,14,17,23 172:7,21 173:16 174:15 175:5 177:18 178:23 179:11,19,23 180:3,7,11,15,25 181:3,6,10,17 183:23 184:7,9,17 185:14 187:14,19 188:12,20 189:3 189:20,20,24 190:1,3,7,13,14 191:2,2,5,6,16 192:2,3,11,24,25 193:1,6 195:6,10 195:15,21 196:2,5 196:19,22 198:5,8 198:11,14,20 199:8,10,11,15 <b>code's</b> 34:24 35:1 133:3 <b>coded</b> 47:1 <b>codes</b> 7:7 21:13,20 22:3,7 23:9,20 28:12,15,18,25 29:2 35:14 37:25	38:2 40:15 41:6,8 41:13,18,22,25 42:10,18 44:20 49:16,17,24 51:3 52:25,25 96:9,10 96:12,13,14,15,17 96:19 106:7 112:8 114:25 115:3 118:12,14,15 127:17,21,24 128:1,15,22 129:7 129:17 130:2,8,13 130:17,21 133:23 134:16 140:4 142:25 144:12,21 145:1 148:8 152:8 152:22 161:19 163:1 165:17,24 166:12,13,18 167:13 179:25 182:6 183:22 184:2 197:5,12 <b>collaborated</b> 75:6 75:11,13 <b>collaborative</b> 74:13 <b>color</b> 114:4 <b>columbia</b> 1:2 2:2 24:24 <b>column</b> 66:19,25 67:1,1 <b>columns</b> 66:18 <b>combustibility</b> 124:21 <b>come</b> 12:4 104:7 <b>comes</b> 187:22 <b>comment</b> 14:20 18:5,8 20:19 45:20 <b>comments</b> 45:22 45:23 46:9	<b>commercial</b> 57:8 57:19 <b>commission</b> 5:3 7:24 9:8,12 13:18 13:20,21 14:21 19:3,9,11 22:9,11 22:18 23:8 26:9 26:12,25 27:12,19 27:23 28:8,17,24 29:6 30:4,13,15,17 30:23 35:1,22 39:16,21,23 40:2 45:3,18 46:2,2,4,8 46:13 47:2,8 48:4 48:20 51:17 52:13 52:21 63:14,24 65:2 67:16 73:25 84:22 99:12,23 100:20 101:3,19 102:14,24 104:13 104:14,14 106:12 107:6,19 117:10 127:16 130:7,16 130:24 131:9 144:9 151:17 158:24 159:7,18 164:6 165:17 169:19 171:1 198:2 <b>commission's</b> 54:19 <b>commissioner</b> 16:25 <b>commissioners</b> 13:23 15:14,20,23 15:24,25 16:13,17 17:14,21,23 18:9 18:14 165:11 167:6 169:10 <b>commissions</b> 167:12
--	---	--	--

[commitments - copies]

<p><b>commitments</b> 110:25  <b>committee</b> 45:8,8                  46:22,24 47:4,6                  48:20  <b>committees</b> 47:9  <b>common</b> 75:17  <b>communications</b>                  84:25 108:14                  148:15 153:2,6,9                  153:14  <b>community</b> 66:22                  75:25 76:9 128:4                  130:20  <b>company</b> 120:21                  152:22  <b>compilation</b> 40:10                  87:14 89:8,18                  93:5  <b>complete</b> 12:21                  37:17 136:10                  176:16 177:21  <b>completed</b> 172:9  <b>completely</b> 12:6                  161:23 173:3  <b>completion</b> 202:14  <b>compliance</b> 45:4                  127:16,20 128:15                  128:21 129:6,16                  130:1,7,12,21  <b>compliant</b> 125:23                  126:9  <b>complied</b> 24:3  <b>complimentary</b>                  135:19,23 136:5                  175:13 187:4,13                  187:18,25  <b>comply</b> 126:21                  185:6  <b>complying</b> 185:16</p>	<p><b>comprise</b> 106:20  <b>concerning</b> 112:19                  147:23 196:5  <b>conclusion</b> 50:22                  51:11 77:15 88:25                  103:9 107:1 109:3                  109:22 110:12                  111:3,10,23                  112:14,24 126:13                  126:25 127:8                  189:7,15  <b>concrete</b> 124:15  <b>conditioning</b> 1:8                  2:8  <b>conditions</b> 73:9  <b>conduct</b> 13:4,7                  14:19 18:10 20:1                  20:3  <b>conducted</b> 142:7  <b>confirm</b> 61:14                  104:20  <b>confirming</b> 56:23  <b>conflict</b> 29:23                  104:23  <b>consequence</b>                  127:13  <b>consequences</b>                  125:12,22 126:8                  127:4,11  <b>considered</b> 45:15                  46:9  <b>considering</b>                  116:16  <b>consist</b> 17:15  <b>consistent</b> 106:12                  152:1 155:5,13,15                  156:10  <b>consisting</b> 194:23  <b>consists</b> 192:11  <b>constitutes</b> 41:12                  47:13,20</p>	<p><b>construct</b> 118:13                  118:18 119:5  <b>constructing</b>                  119:14  <b>construction</b> 17:3                  23:25 24:3 129:4                  129:12  <b>constructions</b>                  129:7  <b>consult</b> 119:4  <b>consultation</b>                  134:25  <b>consulting</b> 135:4                  151:2  <b>contact</b> 91:25  <b>contain</b> 41:5 63:19                  125:3 193:20  <b>contained</b> 201:14  <b>containing</b> 82:3  <b>contains</b> 83:18                  123:10,11 191:5                  192:2  <b>content</b> 170:19                  171:5,9,23 173:5  <b>contents</b> 148:24                  149:9  <b>context</b> 49:13 50:4                  64:22 94:13 135:7                  135:8 153:6  <b>continued</b> 4:1 5:1  <b>contract</b> 101:7,22                  102:20,21,23                  103:1,4,5 108:21                  108:22,23 109:1,8                  109:9,14 110:17                  110:25 111:15                  112:3,11,19 115:7                  116:14 135:13,25                  142:8 145:22,24                  146:17,20,22                  147:1,4,9,13,18,21</p>	<p>147:23 148:7,10                  148:13,24 149:2,5                  149:11 150:4,10                  150:15 151:4,25                  152:9,9 168:20                  186:11 194:1,4,6                  194:23  <b>contractor</b> 17:4                  127:5  <b>contracts</b> 107:5                  111:7 148:20                  149:8 150:15,17                  151:20 152:1,5,6  <b>contribute</b> 62:7                  75:17  <b>contributed</b> 62:14                  74:20 75:2,2,15  <b>contribution</b> 76:6  <b>contributions</b>                  74:17 76:1,10,18                  76:20 77:25 78:2                  78:5 79:23  <b>conversation</b>                  104:4 191:3  <b>conversations</b>                  13:10 147:3,8,20                  193:24 194:3,23                  194:25 195:1  <b>coordinating</b>                  153:5  <b>coordination</b> 7:17                  142:2,5  <b>copies</b> 117:6,24                  135:19,23 136:5                  170:9 174:21,24                  175:13,21,25                  176:2,19 177:3                  186:14,24 187:2,4                  187:9,13,18,25                  188:12,20 199:23</p>
--	---	--	--

[copy - depends]

<p><b>copy</b> 33:19 60:8                  86:12 102:8,11,15                  110:3 119:24                  157:5,17 175:19                  177:18 178:23                  189:2 193:6  <b>copying</b> 61:17  <b>copyright</b> 26:1                  76:9,19 77:1,4,13                  78:1,5 79:7,11,18                  79:22 80:2,14                  81:4 168:2,8,14,16                  168:24 169:3                  172:20,23  <b>copyrighted</b> 81:1                  81:16 172:12  <b>corner</b> 62:18  <b>correct</b> 12:6 17:7                  19:4,7 20:8 24:20                  30:6 35:16,19                  36:3,6,12,21,24,25                  37:11,22,23 38:4                  38:18 39:9,11                  42:25 46:19 47:21                  48:8 51:19 54:12                  56:24 58:6 60:23                  61:1 62:25 68:14                  69:3 70:25 71:16                  71:20 72:1,4 73:4                  74:9,22 79:16                  83:16 84:7,17                  87:16 92:6 100:14                  102:3 109:20                  120:4 122:20                  123:8 124:8 134:5                  140:5 165:2                  166:10,11 170:11                  173:20 174:9,11                  175:24 181:11,13                  181:14,15,17,18                  183:19 184:4</p>	<p>185:2 191:8,10,13                  192:5 201:15  <b>corrected</b> 114:8                  120:17 201:15  <b>corrections</b> 130:20                  201:12  <b>correctly</b> 139:15  <b>correlated</b> 163:12  <b>corridor</b> 125:13                  125:20,23 126:9                  126:16  <b>corridors</b> 125:8  <b>cost</b> 18:25 105:22                  173:18  <b>council</b> 38:9,12                  93:24 190:3,8  <b>council's</b> 162:25  <b>counsel</b> 8:8,25                  199:23  <b>counsel's</b> 82:2  <b>count</b> 177:6  <b>counterclaimant</b>                  1:14 2:14  <b>counterdefendants</b>                  1:11 2:11  <b>county</b> 122:18  <b>couple</b> 24:17                  48:23 83:13 144:2                  197:25  <b>course</b> 12:10 26:8                  27:11,18,22 199:6                  199:13  <b>court</b> 1:1 2:1                  10:24 11:1,16                  24:23  <b>cover</b> 33:20,21,23                  34:13,16 153:21                  153:25 155:1,4,18                  156:2 157:12                  158:9</p>	<p><b>covered</b> 41:12  <b>create</b> 110:6                  111:21 145:6  <b>criteria</b> 29:13,15                  29:21 30:3,7,8,10                  30:12 46:13,16,17                  103:23 104:5,8,9                  104:16,19,21                  105:1,7,13,17,21                  106:1,5,10,14,19                  106:21,23 166:18                  167:2  <b>critical</b> 131:5  <b>cross</b> 195:12,24                  196:7 197:2,7,14  <b>crr</b> 1:23  <b>csr</b> 1:23 202:25  <b>current</b> 13:16                  22:22  <b>currently</b> 13:14                  37:1,9,17  <b>cv</b> 1:7 2:7  <b>cycle</b> 44:25 47:25                  67:25 68:4 69:3                  69:16 138:23                  139:2,6,6 143:10                  143:17,24 144:6                  149:9 152:8</p>	<p><b>dates</b> 100:2  <b>day</b> 12:10 45:19                  103:22 201:16  <b>days</b> 131:10,11  <b>deal</b> 165:17  <b>december</b> 99:8  <b>decision</b> 100:21  <b>declaration</b> 10:16  <b>declare</b> 201:10  <b>defendant</b> 1:14                  2:14 4:13 9:2  <b>defendant's</b> 7:2  <b>defendants</b> 2:20  <b>defining</b> 76:4,5  <b>definition</b> 75:13                  128:11  <b>delegate</b> 128:6  <b>deleted</b> 115:18  <b>deliver</b> 134:15                  136:24 137:6,13                  137:19,22 175:13                  175:25 176:19                  177:3 186:14                  187:4,12,17,25  <b>demand</b> 95:5  <b>department</b> 5:6,18                  7:18,21 9:9 19:9                  23:17,19 35:19                  66:22 75:20,25                  76:8 107:18                  118:11,14 120:23                  122:15,17 128:4                  128:12 130:11                  143:23 151:15  <b>department's</b>                  120:24  <b>departments</b>                  122:22 123:2                  128:9  <b>depends</b> 122:19</p>
		<b>d</b>	
		<p><b>d</b> 1:5,17 2:5,19 4:4                  6:3 8:4 201:10,22  <b>d.c.</b> 3:9 4:9  <b>dar</b> 1:7 2:7  <b>date</b> 85:17 131:4,8                  131:9,10,12,19,23                  139:7,23,24 140:1                  140:4 170:8                  202:19  <b>dated</b> 99:7 132:23                  202:21</p>	

[depicted - documents]

<p><b>depicted</b> 138:25 139:1 <b>depo</b> 7:6 <b>deposit</b> 175:17 176:1,2 186:21 <b>deposition</b> 1:17 2:19 7:10 8:14 10:3 12:25 24:20 34:14,21 83:16 202:13 <b>depositories</b> 187:9 <b>depository</b> 135:24 136:1,10,12 175:20 176:16 177:1,2,2 <b>deputy</b> 86:6 <b>derived</b> 105:23 <b>describe</b> 44:14 <b>described</b> 44:6 161:6 <b>description</b> 7:3 40:9 <b>design</b> 23:13,25 118:12,18 119:5 126:21 <b>designations</b> 136:15 <b>designing</b> 119:13 <b>detail</b> 28:3 161:7 161:14 <b>detailed</b> 161:16,20 <b>details</b> 139:8 170:1 <b>determination</b> 15:18 46:11 157:7 167:11 <b>determine</b> 103:24 184:19 185:1,5,15 <b>determined</b> 30:1 106:16</p>	<p><b>determines</b> 183:13 <b>determining</b> 170:18 171:22 <b>develop</b> 22:19 104:10 152:5 161:3 162:19 163:1 164:5 <b>developed</b> 24:2 44:14 74:13 152:7 152:10 <b>developer</b> 189:25 190:1 <b>developers</b> 27:25 28:4 37:19 134:2 150:18 <b>developing</b> 75:7 116:5 144:12 151:3 161:22 164:7 169:7,11 <b>development</b> 26:3 27:18,22 66:23 74:21 75:25 76:9 78:11,16 102:6,10 102:25 128:4 129:25 163:10 196:22,23 <b>develops</b> 103:2 <b>dgs</b> 7:15 19:11,12 35:18 132:18 142:7 145:24 146:25 147:4,8,12 147:13,15 153:12 <b>dictated</b> 173:5 <b>dictating</b> 171:5,9 <b>diem</b> 45:10 <b>differ</b> 50:19 <b>difference</b> 22:5 27:25 28:1 136:14 <b>different</b> 15:23 16:15,16 29:14 36:17 40:11 114:4</p>	<p>122:13,14 178:21 <b>differently</b> 90:6 <b>difficult</b> 164:19,24 <b>difficulties</b> 92:9 <b>difficulty</b> 96:5,7 <b>direct</b> 154:5 <b>directed</b> 48:6 175:21 186:15,25 187:10,12,17,25 <b>direction</b> 202:10 <b>directly</b> 33:16 61:7 175:17 <b>director</b> 9:11 13:17 19:22 20:5 86:6 <b>directs</b> 37:25 38:3 <b>disabled</b> 136:24 137:20 179:24 180:1 189:21 190:9 <b>disapprove</b> 14:25 15:3,8,10 <b>disclosures</b> 143:10 <b>discuss</b> 18:22 29:3 <b>discussed</b> 40:20 93:5 96:11 128:10 196:21 <b>discussing</b> 54:22 89:11 103:22 106:21 107:4 <b>discussion</b> 16:4 80:23 200:14 <b>discussions</b> 25:22 135:9 147:17 148:20,23 193:9 193:16 194:19,22 <b>display</b> 35:1 <b>displayed</b> 99:12 99:23 100:8,9 <b>dispute</b> 24:24 25:12,20</p>	<p><b>distance</b> 126:15 <b>distinctions</b> 191:1 <b>distinguish</b> 62:13 62:19 64:14 <b>distribute</b> 135:19 <b>distribution</b> 134:25 135:3,6,10 135:14,15 <b>district</b> 1:1,2 2:1,2 24:23 <b>division</b> 5:19 7:23 9:10 66:15 107:18 128:13 129:1,3,5 129:11 151:16 <b>document</b> 19:2 24:8,12,14,16 34:5 34:22 57:24 58:1 61:1 64:22 74:6 74:25 83:9,10,18 83:23,25 84:2,14 84:19,23 85:8,12 85:14,14,16,20 87:14,18,20,24 88:9,13 93:5 94:10 99:4,6 107:14,16,25 108:4,8,9,12 132:9 132:13,15,17,20 132:23 133:1 136:3 138:20 141:19,23,25 150:19,22,23,25 151:2,6,9,13 153:22 154:11,18 154:23 157:16,17 158:10,19 179:1 <b>document's</b> 156:7 <b>documents</b> 13:1,2 13:8 14:18 20:18 21:23 45:2 46:1 48:3 78:22,24</p>
---	---	---	---

[documents - enforce]

<p>84:9 85:3,5 86:8                  86:20,24 87:1,4,7                  87:10 151:3                  161:18  <b>doing</b> 82:18                  166:23  <b>doj.ca.gov</b> 5:13  <b>dollar</b> 108:21,22                  108:25 109:9  <b>domain</b> 58:5,17  <b>doubt</b> 133:20                  156:2 157:1,13                  158:2,10  <b>draft</b> 146:19                  169:16  <b>drafted</b> 173:4  <b>drafting</b> 146:10,11                  170:22  <b>drafts</b> 171:12,12  <b>drawings</b> 24:3  <b>dsa</b> 66:11,14  <b>duly</b> 202:7  <b>duplicate</b> 29:23                  104:23  <b>duties</b> 123:14</p>	<p>35:10,23 36:4,11                  36:15 37:2,10,14                  37:17,21 44:15,19                  44:23,24 53:5,6,7                  53:10 54:4,21                  58:4 65:2 79:2                  99:14 100:12,22                  101:9 103:1 111:8                  112:7,8 140:2                  142:24 146:17                  150:15 163:12                  168:9 172:21,23                  191:5 192:2  <b>editions</b> 70:15,18                  70:24  <b>editorial</b> 170:4  <b>edits</b> 108:9,12                  147:21,22 194:5  <b>education</b> 170:4                  198:2  <b>effect</b> 35:9 36:2,4                  36:11 124:3  <b>effective</b> 22:22                  23:5 36:11 131:9                  131:12 139:7,24                  140:1,4  <b>effects</b> 123:12,20  <b>effectuate</b> 110:25                  116:2  <b>effort</b> 137:25  <b>efforts</b> 74:14                  136:24 137:6,13                  138:4,11 179:22  <b>egress</b> 124:20,22                  125:4  <b>ehler</b> 3:14 8:10                  9:16,16 200:6,9  <b>either</b> 14:25 86:3                  158:15 160:3  <b>elaborate</b> 77:10</p>	<p><b>electric</b> 99:14  <b>electrical</b> 7:8,19                  16:21 34:12 36:23                  43:5,6,11,13,15,16                  43:22,25 44:2,4,15                  44:20,21 46:6                  51:7,25 52:7 53:4                  53:10,17,22,25,25                  54:3,10,14 55:1,7                  55:13,19 56:2,9                  58:3 59:3,7,18                  60:5,7,10,15,22                  61:18,23 62:13,14                  63:16 64:11,20                  65:19 66:8 72:17                  72:23 73:10,18,24                  74:12,21 75:3,7,11                  75:23 76:3,11,19                  77:1,5,10,12 78:1                  78:6,12,17,23 79:1                  79:4,8,12,19,24                  80:3,15,20 81:6,23                  82:6,12,15 91:2,11                  92:5,11 99:24                  100:11,22 101:5                  101:13,20 102:3                  103:1,7 112:12,20                  116:5 117:12,15                  117:16 118:2,8                  121:8 127:6                  131:18,22 132:3                  133:10,12,22                  134:6 135:11                  140:2 154:6,22                  155:5,19 156:3,20                  156:23 157:2,5,13                  157:14,20 158:11                  158:20 159:14,21                  159:24 160:2                  162:14,19,24                  164:5,5,20,21</p>	<p>165:5,18,21 168:3                  168:9,14,17,18,25                  169:7,11,17 171:2                  171:6,13,17,23                  172:7,20 177:18                  178:23 179:11,18                  179:23 180:3,7,11                  180:15 181:9,17                  184:6,9 185:14                  187:14,19 188:12                  188:20 189:3,20                  190:13 191:2,2,5,6                  191:16 192:2,3,11                  192:24,25 193:6                  195:6,9,21 196:2,5                  196:19 198:11,14                  198:20 199:8,10                  199:14  <b>elements</b> 164:20  <b>email</b> 7:11,15                  87:21 132:19,21                  133:9,15,21                  180:20 181:16  <b>emails</b> 85:21,22                  87:7  <b>emergencies</b> 35:8  <b>emergency</b> 175:16  <b>employed</b> 13:14                  20:14 23:7  <b>employee</b> 202:17  <b>employees</b> 197:5                  197:11  <b>employment</b> 13:16                  26:8 27:12,19,23                  28:7  <b>enabling</b> 105:3  <b>encountered</b> 91:1                  91:12  <b>energy</b> 130:6  <b>enforce</b> 127:24,25                  128:21 129:16,20</p>
<p><b>e</b></p>			
<p><b>earlier</b> 17:13 18:3                  20:21 29:2 43:4                  46:17 47:19 51:16                  68:7 69:16 70:23                  73:2 78:21 102:19                  103:22 116:9                  120:17 161:6                  165:1 166:7,17                  167:19 168:12                  169:21 174:25                  175:4 177:16                  179:16 180:19,20                  196:21  <b>edition</b> 22:20,21                  22:23,25 23:2,4</p>			



[enforce - fee]

<p>130:1,7,12,16,20  <b>enforcement</b>                  127:18,19 128:7                  128:17 129:19  <b>enforces</b> 129:6  <b>enforcing</b> 128:14                  129:11  <b>engineers</b> 1:9 2:9  <b>enormous</b> 155:24  <b>ensure</b> 19:23  <b>entail</b> 13:25 14:17  <b>entails</b> 142:17  <b>enter</b> 103:4 108:23  <b>entering</b> 142:7  <b>entire</b> 39:14,20                  52:12,17,18 64:10                  64:22 66:11 67:5                  68:10,13,17 69:14                  82:12 89:19 169:8                  192:24  <b>entirely</b> 191:10  <b>entirety</b> 63:3                  64:15 65:6,12                  67:8,10,17 69:20  <b>entities</b> 142:13                  163:9  <b>entity</b> 53:18,24                  73:18 142:9                  159:20  <b>environment</b>                  123:13,21 124:4  <b>errata</b> 113:23                  114:1,17,23                  175:16  <b>error</b> 114:3,6,6,12                  114:12,13  <b>errors</b> 113:5,16,20                  114:8  <b>essence</b> 123:11,14  <b>essential</b> 129:4,8                  129:12</p>	<p><b>establish</b> 11:4                  134:25  <b>established</b> 43:4                  68:7 73:2 105:3                  135:4 140:19  <b>et</b> 8:16  <b>exact</b> 17:12 21:2                  72:3 143:7  <b>exactly</b> 80:25                  156:11,12 176:12  <b>examination</b> 6:7,8                  6:9,10,11 8:7                  160:16 186:8,13                  188:10 190:25                  197:23 199:4  <b>examined</b> 8:5  <b>example</b> 16:18,24                  66:10 75:20 125:6                  135:13 162:13                  163:8,13 171:24                  183:4  <b>examples</b> 114:7,15  <b>excerpted</b> 63:3  <b>excerpting</b> 140:17  <b>exchange</b> 93:6  <b>exclude</b> 148:15  <b>excluding</b> 153:14  <b>exclusive</b> 105:4  <b>excuse</b> 41:7                  107:18 165:25                  171:12  <b>executed</b> 201:16  <b>executive</b> 9:11                  13:17 19:21 20:5                  86:6 145:24  <b>exhibit</b> 7:4,6,7,8,9                  7:11,13,15,17,19                  24:9,10,13,22 33:3                  34:15,18,20,21                  37:13 40:7 57:22                  57:25 59:12 63:3</p>	<p>65:14 82:1,3,4                  83:6 85:10,13                  87:15,16 98:25                  107:9,11,13                  109:14 131:1                  132:11,14 134:20                  134:22 136:2,2                  138:20 140:6                  141:21,24 145:21                  146:13,14 150:20                  150:23 153:18,20                  153:21 167:17,25                  169:24 170:1                  175:7,11 176:9,10                  176:23 177:11,13                  178:3 180:19                  181:20,21 186:11                  186:12  <b>exhibits</b> 7:1                  181:20  <b>existed</b> 150:9  <b>existing</b> 44:22  <b>exit</b> 124:24 125:8                  125:13,20,23                  126:9  <b>expenses</b> 197:10  <b>experience</b> 23:9                  28:10 58:24 59:11                  119:12,23  <b>expert</b> 156:19,23                  157:20 184:12  <b>experts</b> 45:9 47:10                  163:16  <b>express</b> 17:16,18                  17:24 18:2,4,10                  45:25  <b>expressly</b> 105:4  <b>extent</b> 94:9 191:13  <b>extract</b> 97:19,22                  174:5</p>	<p style="text-align: center;"><b>f</b></p> <p><b>f</b> 3:7  <b>facilities</b> 118:13                  118:19  <b>fact</b> 172:11  <b>failure</b> 127:5  <b>fair</b> 165:16 169:9                  179:4  <b>fairly</b> 82:4  <b>familiar</b> 26:2 34:4                  50:6 59:13 72:25                  126:14 161:21                  162:9,20,23,24  <b>familiarity</b> 28:6,9                  59:5,9 161:24  <b>far</b> 108:21 128:5                  139:25  <b>farther</b> 168:7  <b>february</b> 20:7  <b>federal</b> 202:13  <b>fee</b> 4:6 8:11 9:19                  9:19 26:5,20 27:1                  27:13 30:18 31:16                  31:24 32:3,9                  33:20,25 34:6                  36:7 38:23 39:2                  44:11 47:17 48:10                  48:16 49:25 51:9                  51:22 52:1 53:11                  55:2,8,21 56:4,10                  57:3,10,14 58:10                  58:19 59:14,22                  60:11,17 61:4                  63:2,7,9 64:16,19                  65:13,22 67:12                  69:7,22 70:13,20                  71:10,21 72:5                  73:19 74:23 75:9                  76:13 82:8 84:10                  86:10 88:24 90:1                  91:3,15,24 94:9,24</p>
--	--	--	---

[fee - general]

<p>95:7,20 96:2,22                  97:8,16,25 99:18                  100:4 126:11,22                  132:5 142:14,19                  144:15,19 145:7                  153:25 154:12,14                  185:22 189:4,5,13                  192:19 195:11,23                  196:6,12,17                  197:15 199:1,19                  199:21,24 200:3  <b>fenwick</b> 4:14 7:5                  9:2,5  <b>fenwick.com</b> 4:22  <b>field</b> 45:9 47:11  <b>file</b> 99:13,23                  100:21 101:4                  102:2,5  <b>files</b> 45:4  <b>fill</b> 143:2,5  <b>final</b> 45:24,24,25                  46:5 63:18,25                  67:20,22 68:22                  69:2,14 168:1                  181:25  <b>finalize</b> 149:12  <b>financially</b> 8:22                  202:16  <b>find</b> 69:6,18 70:11                  158:15  <b>findings</b> 104:21  <b>fine</b> 200:15  <b>finish</b> 11:19,23,24  <b>finished</b> 12:1  <b>fire</b> 1:6 2:6 3:3                  7:24 9:15,18                  29:25 30:1 44:8,9                  62:3 106:15,16,17                  107:20 124:6,7,19                  124:20 125:10,10                  128:21 129:16</p>	<p>160:19 168:1  <b>first</b> 25:8 74:11                  88:1 93:4,9 99:10                  132:25 146:19,22                  160:22 167:25                  170:2 171:25                  175:11 177:22                  178:4 180:20,23                  182:4 186:17,19                  187:5  <b>five</b> 156:15 187:8  <b>fix</b> 91:21  <b>fixed</b> 92:2  <b>flexibility</b> 150:3,9  <b>flip</b> 171:25 176:22                  177:13 178:14                  186:12  <b>floor</b> 3:8,17 4:19  <b>flow</b> 125:13  <b>focus</b> 110:1  <b>follow</b> 47:14 48:11                  112:15 113:9                  118:24 160:21                  184:20  <b>followed</b> 19:24  <b>following</b> 26:10                  27:4 68:6 116:3  <b>follows</b> 8:6  <b>followup</b> 199:2  <b>foregoing</b> 201:11                  202:4,6,10,12  <b>form</b> 16:1,5 21:14                  22:14 24:6 26:5                  26:14,20 27:1,13                  28:19 30:18,19                  31:9,16,24 32:3,9                  34:6 35:3 36:7                  38:23 42:3,13,20                  43:1,18 44:3,11                  46:7 47:17 48:9                  48:10,16 49:19,25</p>	<p>51:9,22 52:1,10                  53:11 55:2,8,21                  56:4,10 57:3,10,15                  58:10,19 59:8,14                  59:22 60:11,17                  61:4 62:9 63:17                  64:16 65:13 66:9                  69:22 71:10 73:19                  74:23 84:10 90:1                  90:8 91:15,24                  94:24 95:7 100:4                  100:15 101:6,21                  102:2 114:10,24                  115:19 116:7                  117:8,17 119:25                  124:25 125:15                  126:1,23 127:22                  132:5 144:14                  145:8 147:24                  154:12 191:9                  192:13  <b>format</b> 17:20                  106:11 113:7,19                  123:4  <b>formatting</b> 170:4  <b>forms</b> 143:2,5,8  <b>forth</b> 149:7 170:5                  175:18 202:5  <b>forward</b> 44:22                  67:24 68:4 69:3                  176:22  <b>forwarded</b> 116:11  <b>found</b> 14:2 17:11  <b>foundation</b> 55:16                  61:3,13 73:12                  123:24 137:2,9,16                  138:7 143:13,19                  159:16  <b>four</b> 15:1,7 18:3                  29:2,4 103:3                  169:20 170:25</p>	<p>177:12 187:8  <b>fourth</b> 169:25  <b>francisco</b> 4:20  <b>free</b> 117:23,25                  121:9,14 122:5,22                  131:25 132:2                  173:12,17 174:16                  174:21,22 178:23                  179:6 188:13                  189:2  <b>freely</b> 188:19  <b>front</b> 32:24 33:13                  33:17 64:21                  109:10 153:20  <b>full</b> 38:21 53:16,19                  55:18 56:1,8                  64:20 86:23,25                  175:11  <b>fully</b> 70:5 184:1  <b>functionally</b> 15:22  <b>furnish</b> 10:14,17                  188:19  <b>furnishes</b> 92:4  <b>further</b> 14:25 15:3                  15:8,9 66:16                  88:13 160:4                  182:15 185:21                  197:18 202:12,16  <b>future</b> 88:4</p>
<b>g</b>			
<p><b>g</b> 3:5 116:23  <b>gaining</b> 92:10  <b>game</b> 22:9  <b>general</b> 5:7,18                  7:18,22 9:10                  19:10 23:17,19                  27:9,10 35:19                  107:18 118:11,15                  119:16 120:23                  140:19 141:7,11                  143:23 151:15</p>			

[general - implementation]

<p>170:7  <b>general's</b> 9:7  <b>generally</b> 30:13                  33:7 152:6 162:2                  184:14  <b>give</b> 12:11,21                  32:15,25 123:1                  200:4  <b>given</b> 157:5,17                  185:4 202:11  <b>giving</b> 10:21  <b>go</b> 10:20 11:24                  14:7 66:24 70:19                  82:22 83:22 98:24                  99:1 119:1 136:5                  142:22 144:5,9,21                  145:10 155:11                  160:10 163:10                  164:6 175:3                  181:19 185:24                  186:1  <b>goes</b> 36:1,4,11                  41:17 47:2 161:22                  169:7  <b>going</b> 10:20 11:13                  63:2 74:17 140:11                  141:13,19 143:9                  143:16,23 145:10                  177:6  <b>good</b> 8:8 9:23,24                  10:2 149:8  <b>govern</b> 47:24  <b>governed</b> 184:2                  185:2  <b>governing</b> 48:7                  182:17 183:12                  185:6  <b>government</b> 14:4                  18:21 19:25 39:15                  42:15 88:18 89:5                  141:10 170:7</p>	<p>197:10  <b>governmental</b>                  140:18  <b>governments</b>                  197:4  <b>governor</b> 16:3,14                  16:18,25 17:6,8  <b>grammatical</b>                  114:6  <b>grand</b> 3:16  <b>grant</b> 109:19  <b>grants</b> 110:2  <b>graphic</b> 139:21  <b>great</b> 98:17 165:17                  175:9  <b>green</b> 198:7  <b>groups</b> 25:21  <b>guess</b> 26:21 27:7                  41:3 58:15  <b>guide</b> 64:9</p> <p style="text-align: center;"><b>h</b></p> <p><b>h</b> 123:10 131:1  <b>half</b> 20:6  <b>hand</b> 141:19  <b>handed</b> 24:12                  34:20 57:24                  107:13 141:23                  150:22  <b>handles</b> 159:13  <b>happen</b> 125:19,20                  126:17,21 127:4                  164:10  <b>happened</b> 189:23  <b>happens</b> 30:10,12  <b>hcd</b> 66:19 67:11                  67:18,21,23 68:10                  68:13,17 159:8  <b>hcd's</b> 67:4  <b>head</b> 48:5 56:19                  108:20 111:5                  114:21 121:16,25</p>	<p><b>heading</b> 37:14                  40:7 74:7 88:13                  123:10 138:22,22  <b>health</b> 14:2 17:11                  29:19 75:21                  129:25 130:11                  166:9,14,19,25                  167:8  <b>hear</b> 30:11 105:12  <b>heard</b> 49:8,13,18                  82:2 94:20  <b>hearing</b> 18:13  <b>hearings</b> 14:19                  18:10  <b>heating</b> 1:8 2:8  <b>held</b> 20:25 172:23  <b>help</b> 113:12 114:2                  190:4  <b>helped</b> 189:25  <b>helpful</b> 66:6  <b>helps</b> 176:7  <b>hereinafter</b> 110:5                  110:16  <b>hereto</b> 175:18,20                  201:14  <b>high</b> 166:1 169:9  <b>highlight</b> 116:25  <b>history</b> 144:20  <b>hold</b> 58:11 176:11                  195:9 198:13,19  <b>holds</b> 198:10  <b>honestly</b> 150:1  <b>hospital</b> 130:3                  182:20 183:4,25  <b>hospitals</b> 42:11                  182:10 183:8,10                  183:14 184:12  <b>host</b> 37:1,4,5,9,17  <b>hosted</b> 39:6  <b>housing</b> 66:22                  75:25 76:9 128:4</p>	<p>128:7  <b>https</b> 35:14  <b>huge</b> 154:23  <b>huh</b> 15:12,15                  18:18 31:6 37:16                  40:19 46:23 47:22                  48:23 56:15 67:2                  88:19,21 89:12                  91:9 93:16 102:18                  115:17 123:8                  131:2 132:16                  139:17 140:15                  151:14 167:18                  180:22 199:18  <b>hunter</b> 7:16                  132:21</p> <p style="text-align: center;"><b>i</b></p> <p><b>iapmo</b> 133:23                  134:9,10,11,15                  152:9  <b>icc</b> 93:13,25 95:10                  95:14,19 96:1,10                  96:21 97:1,4,7,12                  97:15,20,23 98:4,6                  98:14,19 133:3                  152:9 181:2,12  <b>idea</b> 101:18  <b>identification</b>                  34:21 57:25 85:13                  132:14 141:24                  150:23  <b>identified</b> 136:2,6  <b>identifies</b> 40:18                  62:1 151:9  <b>identify</b> 8:25                  121:18  <b>impaired</b> 137:6,23                  180:8 190:14  <b>implementation</b>                  21:13</p>
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