

Chapter NR 484

INCORPORATION BY REFERENCE

NR 484.01 Applicability; purpose.
 NR 484.02 Definitions.
 NR 484.03 Code of federal regulations.
 NR 484.04 Code of federal regulations appendices.

NR 484.05 National technical information service.
 NR 484.06 Other government organizations.
 NR 484.10 American society for testing and materials.
 NR 484.11 Other private organizations.

NR 484.01 Applicability; purpose. (1) APPLICABILITY. This chapter applies to all air contaminant sources governed by chs. NR 400 to 499 and to their owners and operators.

(2) PURPOSE. This chapter is adopted under ss. 227.21 (2) and 285.11, Stats., to incorporate by reference testing, monitoring and other technical standards, established by the federal government and technical societies and organizations, to which reference is made in chs. NR 400 to 439 and 445 to 499.

Note: Technical Standards to which reference is made in ch. NR 440 are incorporated by reference in s. NR 440.17.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86; am. Register, September, 1987, No. 381, eff. 10-1-87; am. Register, February, 1990, No. 410, eff. 3-1-90; am. Register, May, 1992, No. 437, eff. 6-1-92; am. (2), Register, February, 1995, No. 470, eff. 3-1-95; correction in (2) made under s. 13.93 (2m) (b) 7., Stats., Register, January, 1997, No. 493.

NR 484.02 Definitions. The definitions contained in ch. NR 400 apply to the terms used in this chapter.

History: Cr. Register, September, 1986, No. 369, eff. 10-1-86.

NR 484.03 Code of federal regulations. The federal regulations in effect on July 1, 1998 listed in the first column of Table 1 are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 in the third column of Table 1.

Note: Copies of these materials are available for inspection in the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin and in some public libraries or may be purchased for personal use from:

Superintendent of Documents
 PO Box 371954
 Pittsburgh PA 15250-7954

Table 1
 CFR References

| CFR Reference | Title | Incorporated by Reference For |
|-------------------------------|---|--|
| (1) 29 CFR 1910.145(d)(4) | | NR 447.12 (4) (a) 2. NR 447.14 (2) (a) 2. NR 447.17 (2) (a) 2. |
| (2) 29 CFR 1910.1001(j)(2) | | NR 447.13 (1) (a) 4. |
| (3) 29 CFR 1926.58(k)(2)(iii) | | NR 447.13 (1) (a) 4. |
| (4) 40 CFR part 53 | Ambient Air Monitoring Reference and Equivalent Methods | NR 404.02 (4m) NR 404.06 (3) (b) |

History: Cr. Register, December, 1988, No. 396, eff. 1-1-89; am. (3), Register, September, 1989, No. 405, eff. 10-1-89; renum. from NR 484.06, Register, February, 1990, No. 410, eff. 3-1-90; am. (intro.) and (3), cr. (6), Register, August, 1991, No. 428, eff. 9-1-91; am. (intro.), r. (2) and (4), renum. (1), (3), (5) and (6) to be (3), (1), (2) and (5) and am. (1) and (5), (3) renum. from NR 484.04 (3) and am., Register, May, 1992, No. 437, eff. 6-1-92; renum. (5) to be (6) and am., cr. (5), Register, May, 1993, No. 449, eff. 6-1-93; am. (intro.) and (5), Register, June, 1994, No. 462, eff. 7-1-94; r. and recr., Register, February, 1995, No. 470, eff. 3-1-95; r. (5) and (6), Register, December, 1995, No. 480, eff. 1-1-96; am. (intro.), Register, March, 1997, No. 495, eff. 4-1-97; am. (intro.) and (4), Register, November, 1999, No. 527, eff. 12-1-99.

NR 484.04 Code of federal regulations appendices. The appendices to federal regulations in effect on July 1, 1998 listed in the first column of Table 2 are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 or code of federal regulations appendix method listed in the third column of Table 2. Since some of these materials are incorporated by reference for another appendix of the code of federal regulations and the other appendix is also incorporated by refer-

ence in this section, the materials listed in this section which are incorporated by reference for the other appendix are hereby also incorporated by reference and made a part of this chapter.

Note: Copies of these materials are available for inspection in the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin and in some public libraries or may be purchased for personal use from:

Superintendent of Documents
 PO Box 371954
 Pittsburgh PA 15250-7954

Table 2
CFR Appendix References

| | CFR Appendix Referenced | Title | Incorporated by Reference For |
|-------|---------------------------------------|--|---|
| (1) | 29 CFR 1926.58 Appendix G | Work Practices and Engineering Controls for Small-Scale, Short-Duration Asbestos Renovation and Maintenance Activities—Non-Mandatory | NR 447.02 (18) Note |
| (2) | 40 CFR part 50 Appendices A to K | | NR 404.02 (8) NR 404.06 (2) |
| (3) | 40 CFR part 50 Appendix B | Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method) | NR 404.02 (11) |
| (4) | 40 CFR part 50 Appendix H | Interpretation of the National Ambient Air Quality Standards for Ozone | NR 404.04 (5) |
| (5) | 40 CFR part 50 Appendix J | Reference Method for the Determination of Particulate Matter as PM ₁₀ in the Atmosphere | NR 404.02 (4m) |
| (6) | 40 CFR part 50 Appendix K | Interpretation of the National Ambient Air Quality Standards for Particulate Matter | NR 404.04 (8) (b) 3. |
| (7) | 40 CFR part 51 Subpart S Appendix B | Test Procedures | NR 485.02 (18) |
| (8) | 40 CFR part 51 Subpart S Appendix E | Transient Test Driving Cycle | NR 485.02 (22) |
| (9) | 40 CFR part 51 Appendix M | Recommended Test Methods for State Implementation Plans | NR 439 NR 466.09 (5) |
| (10) | 40 CFR part 51 Appendix S, Section IV | Sources That Would Locate in a Designated Nonattainment Area | NR 405.11 (1) (e) |
| (11) | 40 CFR part 51 Appendix W | Guideline on Air Quality Models (Revised) | NR 405.10 NR 489.09 (3) (intro.) |
| (12) | 40 CFR part 58 Appendix B | Quality Assurance Requirements for Prevention of Significant Deterioration (PSD) Air Monitoring | NR 405.11 (3) |
| (13) | 40 CFR part 60 Appendix A | Test Methods | NR 400.02 (131) NR 439 NR 460 to 469 |
| (14) | 40 CFR part 60 Appendix A, Method 3 | Gas Analysis for the Determination of Dry Molecular Weight | NR 449.09 (6) (a) 3. |
| (15) | 40 CFR part 60 Appendix A, Method 5 | Determination of Particulate Emissions from Stationary Sources | 40 CFR part 61 Appendix B, Method 101 |
| (16) | 40 CFR part 60 Appendix A, Method 18 | Measurement of Gaseous Organic Compound Emissions by Gas Chromatography | NR 400.02 (77) NR 422.142 (5) (a) |
| (17) | 40 CFR part 60 Appendix A, Method 21 | Determination of Volatile Organic Compounds Leaks | NR 420.02 (39m) NR 421.02 (21) NR 421.05 (2) (e) NR 421.06 (2) (e) |
| (18) | 40 CFR part 60 Appendix A, Method 22 | Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares | NR 415.075 (3) (c) |
| (19) | 40 CFR part 60 Appendix A, Method 25 | Determination of Total Gaseous Nonmethane Organic Emissions as Carbon | NR 422.42 (5) (a) |
| (20) | 40 CFR part 60 Appendix A, Method 25A | Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer | NR 422.142 (5) (a) |
| (21) | 40 CFR part 60 Appendix B | Performance Specifications | NR 428 NR 439 NR 460 to 469 |
| (21m) | 40 CFR part 60 Appendix F | Quality Assurance Procedures | NR 466.10 (2) |
| (22) | 40 CFR part 61 Appendix A | National Emission Standards for Hazardous Air Pollutants: Compliance Status Information | NR 447.16 (2) |
| (23) | 40 CFR part 61 Appendix B | Test Methods | NR 400.02 (131) NR 439 NR 445.02 (9m) NR 446 to NR 469 |

Table 2 (Continued)
CFR Appendix References

| CFR Appendix Referenced | Title | Incorporated by Reference For |
|--|--|--|
| (24) 40 CFR part 63, Subpart KK, Appendix A | Data Quality Objective and Lower Confidence Limit Approaches for Alternative Capture Efficiency Protocols and Test Methods | NR 439.06 (3) (am) NR 466.09 (6) |
| (25) 40 CFR part 63 Appendix A | Test Methods | NR 400.02 (131) NR 439 NR 460 to 469 |
| (26) 40 CFR part 72 Appendix D | Calculation of Potential Electric Output Capacity | NR 409.02 (57) |
| (27) 40 CFR part 75 Appendices A to I | | NR 428 NR 439 |
| (28) 40 CFR part 763 Subpart E Appendix E, Section 1 | Polarized Light Microscopy | NR 447.02 (1) NR 447.02 (16) NR 447.02 (27) NR 447.02 (36) NR 447.09 (1) |

History: Cr. Register, August, 1991, No. 428, eff. 9-1-91; am. (intro.), (5) and (6), renum. (3) to be NR 484.03 (4) and am., renum. (4) and (7) to be (3) and (4) and am. (4), Register, May, 1992, No. 437, eff. 6-1-92; renum. (2), (3) (intro.) (a) to (c) to be (2) (d), (intro.), (c), (a) and (b) and am. (2) (d), Register, May, 1993, No. 449, eff. 6-1-93; am. (intro.), (2) (d), cr. (7), Register, December, 1993, No. 456, eff. 1-1-94; cr. (1) (c), Register, June, 1994, No. 462, eff. 7-1-94; r. and recr. Register, February, 1995, No. 470, eff. 3-1-95; cr. (9), (19), Register, April, 1995, No. 472, eff. 5-1-95; cr. (13m), (15e) and (15m), Register, June, 1995, No. 474, eff. 7-1-95; am. (9), Register, September, 1995, No. 477, eff. 10-1-95; am. (18), cr. (18m), renum. (7) to (21) to be (9) to (27), cr. (7) and (8), Register, December, 1995, No. 480, eff. 1-1-96; am. (27), Register, January, 1997, No. 493, eff. 2-1-97; am. (intro.), (13), (16), (21) and (24), Register, March, 1997, No. 495, eff. 4-1-97; am. (intro.), (11), (13), (16), (23) and (24), Register, November, 1999, No. 527, eff. 12-1-99; am. (9), r. (24) to (27) to be (25) to (28), cr. (21m) and (24) and am. (24), Register, March, 2000, No. 531, eff. 4-1-00; am. (21) and (27), Register, January, 2001, No. 541, eff. 2-1-01.

NR 484.05 National technical information service. The National Technical Information Service (NTIS) documents listed in the first column of Table 3 are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 in the third column of Table 3.

Note: Copies of these materials are available for inspection in the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin or may be purchased for personal use from:
National Technical Information Service
5285 Port Royal Road
Springfield VA 22161

Table 3
NTIS Document References

| Document Reference | Document Title | Incorporated by Reference For |
|---|--|--|
| (1) NTIS Order No. PB 87-100012 | Standard Industrial Classification Manual, 1987 | NR 400.02 (74) NR 400.02 (86) NR 400.02 (91) NR 400.02 (149) NR 405.02 (8) NR 407.02 (4) (intro.) NR 407.05 (4) (b) NR 408.02 (5) NR 410.02 (4) NR 421.02 (3) NR 421.02 (17) NR 422.02 (112) NR 422.095 (1) NR 422.15 (1) (intro.) NR 438.02 (1) |
| (2) NTIS Order No. PB-266 227 | Recommended Industrial Ventilation Guidelines, U.S. Department of Health, Education, and Welfare, National Institute of Occupational Safety and Health, 1976 | NR 421.04 (3) (c) 2. |
| (3) NTIS Order No. PB 93-192664 | Metropolitan Areas, 1993 | NR 400.02 (96) |
| (4) San Diego Air Pollution Control District Test Procedure TP-91-1 | Pressure Decay/Leak Test Procedure, Phase I and Phase II Vapor Recovery Installations | NR 439.06 (3) (i) |
| (5) San Diego Air Pollution Control District Test Procedure TP-91-2 | Pressure Drop vs. Flow/Liquid Blockage Test Procedure, Phase II Balance System Installations | NR 439.06 (3) (i) |

Table 3 (Continued)
NTIS Document References

| Document Reference | Document Title | Incorporated by Reference For |
|-------------------------------------|---|--|
| (8) EPA, OAQPS, AP-42 | Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Fifth Edition, January 1995, as revised by Supplement A (February 1996), Supplement B (November 1996), Supplement C (November 1997) | NR 438.03 (5) (a) NR 489.09 (2) (b) |
| (9) EPA-450/3-84-014, December 1984 | Review of National Emission Standards for Mercury | NR 446.04 (3) (d) Note |

History: Cr. (intro.) and (1), (2) renum. from NR 484.03 (2) and am. Register, February, 1990, No. 410, eff. 3-1-90; cr. (2) to (4), (6) and (7), renum. (2) to be (5), Register, August, 1991, No. 428, eff. 9-1-91; am. (1), (4) to (6), renum (7) (a) to (e) to be (7) (c) to (e) and am., cr. (7) (a) and (b), Register, May, 1992, No. 437, eff. 6-1-92; am. (1), Register, January, 1993, No. 445, eff. 2-1-93; am. (3), cr. (3) (b) to (e) and (8), Register, May, 1993, No. 449, eff. 6-1-93; cr. (1m), am. (3) (b), Register, December, 1993, No. 456, eff. 1-1-94; renum. (2) to be (9) and am. Register, August, 1994, No. 464, eff. 9-1-94; r. and recr. Register, February, 1995, No. 470, eff. 3-1-95; r. (6), (7), Register, April, 1995, No. 472, eff. 5-1-95; am. (3), Register, June, 1995, No. 474, eff. 7-1-95; am. (1), Register, August, 1995, No. 476, eff. 9-1-95; am. (8), Register, September, 1995, No. 477, eff. 10-1-95; am. (3), Register, December, 1995, No. 480, eff. 1-1-96; am. (1), (8), Register, January, 1997, No. 493, eff. 2-1-97; am. (1), (3), (8), r. and recr. (9), r. (10), Register, November, 1999, No. 527, eff. 12-1-99.

NR 484.06 Other government organizations. The following materials from other government organizations listed in the first column of Tables 4A to 4D are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 in the third column of Tables 4A to 4D.

Note: Copies of these materials are available for inspection in the offices of the

department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin or may be purchased for personal use by writing to the organizations listed in the individual subsections.

(1) The following is a document published in the federal register.

Note: Copies can be made for personal use from the federal register on microfiche, which is available at the department of natural resources library.

Table 4A
Federal Register Document Reference

| Citation | Title | Incorporated by Reference For |
|---------------------------|---|--|
| 51 FR 43814, Dec. 4, 1986 | Emissions Trading Policy Statement; General Principles for Creation, Banking, and Use of Emission Reduction Credits | NR 408.06 (1) (d) Note NR 425.05 (1) (b) 2. |

(2) The following is a document from the U.S. bureau of mines.

Note: Copies may be purchased for personal use from:
Bureau of Mines
U.S. Department of the Interior
Washington DC 20240

Table 4B
U.S. Bureau Of Mines Document Reference

| Document Number | Title | Incorporated by Reference For |
|---------------------------|---|-------------------------------|
| Information Circular 7588 | Fundamentals of Smoke Abatement, December, 1950, Ringlemann Chart | NR 400.02 (137) Note |

(3) The following document is from the federal highway administration.

Note: Copies may be purchased for personal use from:
Superintendent of Documents
PO Box 371954
Pittsburgh PA 15250-7954

Table 4C
Federal Highway Administration Document Reference

| Document Number | Title | Incorporated by Reference For |
|-----------------|--|-------------------------------|
| FP-92, 1992 | Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, Section 401 | NR 447.04 (2) (c) |

(4) The following is a database document from the U.S. environmental protection agency.

Note: Electronic copies may be downloaded for personal use from the following Internet address: <http://www.epa.gov/ttnchie1/fire.html>

Those without access to a computer can obtain printed copies of all or of specific parts of FIRE from:

Department of Natural Resources
Bureau of Air Management
Box 7921
101 South Webster Street
Madison WI 53707-7921

Table 4D
U.S. Environmental Protection Agency Document Reference

| Document Number | Title | Incorporated by Reference For |
|-----------------------|--|------------------------------------|
| EPA, OAQPS, FIRE 6.01 | Factor Information Retrieval Data System, Version 6.01 | NR 438.02 (2) NR 438.03 (5) (a) |

History: Cr. Register, February, 1995, No. 470, eff. 3-1-95; am. (1), Register, December, 1996, No. 492, eff. 1-1-97; am. (2), cr. (4), Register, November, 1999, No. 527, eff. 12-1-99.

NR 484.10 American society for testing and materials. The American society for testing and materials (ASTM) standards listed in the first column of Table 5 are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 in the third column of Table 5. Some of the standards are also incorporated for Appendix A or B of 40 CFR part 60, Appendix B of 40 CFR part 61 or Appendix A, D, E, F or G of 40 CFR part 75 as in effect on July 1, 1998. Since these Appendices are incorporated by reference in s. NR 484.04, standards listed in this section which are incorporated by reference for the Appendices are hereby also incorporated by reference and made a part of this chapter and chs. NR 400 to 439 and 445 to 499.

Note: These materials are available for inspection in the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin or may be purchased for personal use at one of the following addresses:

American Society for Testing and Materials (ASTM)
100 Barr Harbor Drive
W Conshohocken PA 19428-2959
(610) 832-9500

or from:

Bell & Howell Information and Learning
300 North Zeeb Road
PO Box 1346
Ann Arbor MI 48106-1346

Table 5
ASTM Standard References

| Standard Number | Standard Title | Incorporated by Reference For |
|-------------------------|--|--|
| (1) ASTM C136-96a | Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates | NR 415.02 (9) |
| (2) ASTM D97-96a | Standard Test Methods for Pour Point of Petroleum Products | NR 420.02 (41) |
| (3) ASTM D129-95 | Standard Test Method for Sulfur in Petroleum Products (General Bomb Method) | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices A and D NR 439.08 (2) (b) |
| (4) ASTM D240-92 (1997) | Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices A, D, E and F NR 400.02 (79) NR 439.08 (2) (c) |
| (5) ASTM D287-92 (1995) | Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method) | 40 CFR part 75 Appendix D |
| (6) ASTM D323-94 | Standard Test Method for Vapor Pressure of Petroleum Products (Reid Method) | NR 420.02 (31) |
| (7) ASTM D388-98 | Standard Classification of Coals by Rank | 40 CFR part 75 Appendix F NR 400.02 (40) |
| (8) ASTM D396-98 | Standard Specification for Fuel Oils | NR 400.02 (70) NR 400.02 (135) NR 420.03 (1) (a) |
| (9) ASTM D523-89 (1999) | Standard Test Method for Specular Gloss | ANSI/AHA A135.5-1988 NR 422.02 (49m) |
| (10) ASTM D737-96 | Standard Test Method for Air Permeability of Textile Fabrics | NR 447.15 (1) (a) 1. |
| (12) ASTM D968-93 | Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive | ANSI/AHA A135.5-1988 |
| (13) ASTM D975-98a | Standard Specification for Diesel Fuel Oils | NR 409.02 (34) NR 420.03 (1) (a) |
| (14) ASTM D1037-96a | Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials | ANSI/AHA A135.5-1988 |

Table 5 (Continued)
ASTM Standard References

| | Standard Number | Standard Title | Incorporated by Reference For |
|-------|----------------------|--|---|
| (15) | ASTM D1072-90 (1994) | Standard Test Method for Total Sulfur in Fuel Gases | 40 CFR part 75 Appendix D |
| (16) | ASTM D1193-91 | Standard Specification for Reagent Water | 40 CFR part 60 Appendix A: Method 5F, par. 3.1 Method 5H, par. 3.1.3 Method 6, par. 3.1.1 Method 7, par. 3.2.2 Method 7A, par. 3.2 Method 7C, par. 3.1.1 Method 7D, par. 3.1.1 Method 8, par. 3.1.3 Method 11, par. 6.1.3 Method 12, par. 4.1.3 Method 13A, par. 6.1.2 Method 14A, par. 7.1 Method 25D, par. 3.2.2.4 Method 26, par. 3.1.1 Method 26A, par. 3.1.1 Method 29, pars. 4.2.2, 4.4.2 and 4.5.6 40 CFR part 61 Appendix B, Method 101, par. 6.1.1 |
| (17) | ASTM D1217-93 | Standard Test Method for Density and Relative Density (Specific Gravity) of Liquids by Bingham Pycnometer | 40 CFR part 75 Appendix D |
| (18) | ASTM D1250-80 (1997) | Standard Guide for Petroleum Measurement Tables | 40 CFR part 75 Appendix D |
| (20) | ASTM D1298-85 (1990) | Standard Practice for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method | 40 CFR part 75 Appendix D |
| (21) | ASTM D1308-87 (1998) | Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes | ANSI/AHA A135.5-1988 |
| (22) | ASTM D1475-96 | Standard Test Method for Density of Liquid Coatings, Inks, and Related Products | 40 CFR part 60 Appendix A: Method 24, par. 2.1 Method 24A, par. 2.2 Method 24A, par. 2.3 |
| (23) | ASTM D1480-93 (1997) | Standard Test Method for Density and Relative Density (Specific Gravity) of Viscous Materials by Bingham Pycnometer | 40 CFR part 75 Appendix D |
| (24) | ASTM D1481-93 (1997) | Standard Test Method for Density and Relative Density (Specific Gravity) of Viscous Materials by Lipkin Bicapillary Pycnometer | 40 CFR part 75 Appendix D |
| (25) | ASTM D1552-95 | Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method) | 40 CFR part 75 Appendices A and D NR 439.08 (2) (b) |
| (25m) | ASTM D1613-96 (1999) | Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products | NR 422.02 (67) |
| (26) | ASTM D1826-94 | Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices E and F NR 400.02 (79) |
| (27) | ASTM D1945-96 | Standard Test Method for Analysis of Natural Gas by Gas Chromatography | 40 CFR part 75 Appendices F and G |
| (28) | ASTM D1946-90 (1994) | Standard Practice for Analysis of Reformed Gas by Gas Chromatography | 40 CFR part 75 Appendices F and G NR 460.10 (2) (f) |

Table 5 (Continued)
ASTM Standard References

| Standard Number | Standard Title | Incorporated by Reference For |
|--|---|---|
| (29) ASTM D1989-96 | Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters | NR 439.08 (1) (d) |
| (30) ASTM D2013-86 (1994) | Standard Method of Preparing Coal Samples for Analysis | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix F NR 439.08 (1) (b) |
| (31) ASTM D2015-96 | Standard Test Method for Gross Calorific Value of Coal and Coke by the Adiabatic Bomb Calorimeter | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendices A, D, E and F NR 400.02 (79) NR 439.08 (1) (d) |
| (32) ASTM D2197-98 | Standard Test Method for Adhesion of Organic Coatings by Scrape Adhesion | ANSI/AHA A135.5-1988 |
| (33) ASTM D2234-98 | Standard Practice for Collection of a Gross Sample of Coal | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix F NR 439.08 (1) (a) NR 439.085 (2) (a) 1. NR 439.085 (2) (b) 1. NR 439.085 (2) (c) 1. |
| (34) ASTM D2369-98 | Standard Test Method for Volatile Content of Coatings | 40 CFR part 60 Appendix A, Method 24, par. 2.2 |
| Note: ASTM D2382 was discontinued in 1994, and replaced by ASTM D4809. | | |
| (36) ASTM D2486-96 | Standard Test Method for Scrub Resistance of Wall Paints | ANSI/AHA A135.5-1988 |
| (37) ASTM D2502-92 (1996) | Standard Test Method for Estimation of Molecular Weight (Relative Molecular Mass) of Petroleum Oils from Viscosity Measurements | 40 CFR part 75 Appendix G |
| (38) ASTM D2503-92 (1997) | Standard Test Method for Relative Molecular Mass (Molecular Weight) of Hydrocarbons by Thermoelectric Measurement of Vapor Pressure | 40 CFR part 75 Appendix G |
| (39) ASTM D2622-98 | Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry | 40 CFR part 75 Appendices A and D |
| (39m) ASTM D2879-97 | Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope | NR 422.142 (5) (d) |
| (40) ASTM D2880-98 | Standard Specification for Gas Turbine Fuel Oils | NR 420.03 (1) (a) |
| (41) ASTM D2986-95a | Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Diocetyl Phthalate) Smoke Test | 40 CFR part 60 Appendix A: Method 5, par. 3.1.1 Method 12, par. 4.1.1 Method 13A, par. 6.1.1.2 Method 17, par. 3.1.1 |
| (41m) ASTM D3172-89 (1997) | Standard Practice for Proximate Analysis of Coal and Coke | NR 439.098 (1) (b) |
| (42) ASTM D3173-87 (1996) | Standard Test Method for Moisture in the Analysis Sample of Coal and Coke | 40 CFR part 60 Appendix A, Method 19 NR 439.08 (1) (f) |
| (43) ASTM D3174-93 | Standard Test Method for Ash in the Analysis Sample of Coal and Coke from Coal | 40 CFR part 75 Appendix G NR 439.08 (1) (e) |

Table 5 (Continued)
ASTM Standard References

| Standard Number | Standard Title | Incorporated by Reference For |
|---------------------------|---|--|
| (44) ASTM D3176-89 (1997) | Standard Practice for Ultimate Analysis of Coal and Coke | 40 CFR part 75 Appendices A and F NR 439.08 (1) (g) NR 439.098 (1) (a) |
| (45) ASTM D3177-89 (1997) | Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix A NR 439.08 (1) (c) |
| (46) ASTM D3178-89 (1997) | Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke | 40 CFR part 75 Appendix G |
| (47) ASTM D3238-95 | Standard Test Method for Calculation of Carbon Distribution and Structural Group Analysis of Petroleum Oils by the n-d-M Method | 40 CFR part 75 Appendix G |
| (48) ASTM D3792-98 | Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph | 40 CFR part 60 Appendix A, Method 24, par. 2.3 |
| (49) ASTM D4017-96a | Standard Test Method for Water in Paints and Paint Materials by Karl Fischer Method | 40 CFR part 60 Appendix A, Method 24, par. 2.4 |
| (50) ASTM D4052-96 | Standard Test Method for Density and Relative Density of Liquids by Digital Density Meter | 40 CFR part 75 Appendix D |
| (51) ASTM D4057-95 | Standard Practice for Manual Sampling of Petroleum and Petroleum Products | 40 CFR part 75 Appendix D NR 439.08 (2) (a) |
| (52) ASTM D4177-95 | Standard Practice for Automatic Sampling of Petroleum and Petroleum Products | 40 CFR part 75 Appendix D NR 439.08 (2) (a) |
| (53) ASTM D4239-94 | Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods | 40 CFR part 60 Appendix A, Method 19 40 CFR part 75 Appendix A NR 439.08 (1) (c) |
| (54) ASTM D4294-98 | Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry | 40 CFR part 75 Appendices A and D NR 439.08 (2) (b) |
| (55) ASTM D4809-95 | Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Intermediate Precision Method) | 40 CFR part 75 Appendices D, E and F NR 460.10 (2) (f) |
| (56) ASTM E84-97a | Standard Test Method for Surface Burning Characteristics of Building Materials | ANSI/AHA A135.5-1988 |
| (57) ASTM G23-96 | Standard Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials | ANSI/AHA A135.5-1988 |

History: Renum. from NR 484.06 (4) and am., Register, February, 1995, No. 470, eff. 3-1-95; am. (1), (3), (7), (8), (15), (39), (51), (54), cr. (12m), (19), Register, April, 1995, No. 472, eff. 5-1-95; cr. (39m), Register, June, 1995, No. 474, eff. 7-1-95; am. (12), (17), (23), (24), (26), (29) to (31), (34), (40), (43) to (46), (53), (55) and (56), r. (11), Register, January, 1997, No. 493, eff. 2-1-97; am. (intro.), (28) and (35), Register, March, 1997, No. 495, eff. 4-1-97; am. (intro.), (1) to (10), (13) to (16), (18), (19), (21), (22), (24), (25) to (29), (31), (32), (33), (34), (36), (37), (39) to (42), (44), (47) to (52), (54), r. (12m), (35), renum. and am. (55) and (56) to be (56) and (57) and cr. (41m) and (55), Register, November, 1999, No. 527, eff. 12-1-99; am. (9), cr. (25m), Register, January, 2001, No. 541, eff. 2-1-01.

NR 484.11 Other private organizations. The following materials from other private organizations listed in the first column of Tables 6A to 6G are incorporated by reference for the corresponding sections of chs. NR 400 to 439 and 445 to 499 listed in the third column of Tables 6A to 6G.

Note: Copies of these materials are available for inspection in the offices of the department of natural resources, secretary of state and revisor of statutes, Madison, Wisconsin or may be purchased for personal use by writing to the organizations listed in the individual subsections.

(1) The following is a document from the American architectural manufacturers association (AAMA).

Note: Copies may be purchased for personal use from:
American Architectural Manufacturers Association
1827 Walden Office Square Suite 104
Schaumburg IL 60173-4628

Table 6A
AAMA Document Reference

| Document Number | Title | Incorporated by Reference For |
|-----------------|---|-------------------------------|
| AAMA 2604-98 | Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings On Aluminum Extrusions and Panels | NR 422.02 (42) |

(2) The following are documents from the American conference of governmental industrial hygienists (ACGIH).

Note: Copies may be purchased for personal use from:
American Conference of Governmental Industrial Hygienists
Technical Information Office
1330 Kemper Meadow Dr
Cincinnati OH 45240

Table 6B
ACGIH Document References

| Document Number | Title | Incorporated by Reference For |
|------------------------|--|--|
| (a) ISBN:0-936712-72-4 | Threshold Limit Values and Biological Exposure Indices for 1987-1988 | NR 445.04 (1) (a) 1. NR 445.04 (1) (a) 2. NR 445.04 (1) (b) NR 445.04 (2) (a) NR 445.04 (2) (b) NR 445.04 (3) (c) 6. NR 445.05 (1) (a) 1. NR 445.05 (1) (a) 2. NR 445.05 (1) (b) NR 445.05 (2) (a) NR 445.05 (2) (b) NR 445.05 (3) (c) 7. |
| (b) ISBN:0-936712-86-4 | 1990-1991 Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices | NR 445.04 (4) (a) 1. NR 445.04 (4) (a) 2. NR 445.04 (4) (b) NR 445.04 (4r) (b) 4. NR 445.05 (4) (a) 1. NR 445.05 (4) (a) 2. NR 445.05 (4) (b) NR 445.05 (4r) (b) 4. NR 445.06 (4) |
| (d) | Industrial Ventilation: A Manual of Recommended Practice, 20th ed., 1988 | NR 421.04 (3) (c) 1. |

(3) The following is a document from the American gas association (AGA) laboratories.

Note: Copies may be purchased for personal use from:
American Gas Association Laboratories
8501 East Pleasant Valley Road
Cleveland OH 44131

Table 6C
AGA Laboratories Document Reference

| Document Number | Title | Incorporated by Reference For |
|---|--|--|
| Standard Z21.6 - 1973 with addenda: Z21.6a - 1975, Z21.6b - 1978 | American National Standard for Domestic Gas-Fired Incinerators | NR 415.07 (1) (b) 2. NR 415.07 (2) (a) 4. |

(4) The following are documents from the American hardboard association (AHA).

Note: Copies may be purchased for personal use from:
American Hardboard Association
1210 W Northwest Highway
Palatine IL 60067

Table 6D
AHA Document References

| Document Number | Title | Incorporated by Reference For |
|--------------------------|--------------------------------|-------------------------------|
| (a) ANSI/AHA A135.4-1982 | Basic Hardboard | ANSI/AHA A135.5-1988 |
| (b) ANSI/AHA A135.5-1988 | Prefinished Hardboard Paneling | NR 422.02 (13) |

(5) The following is a document from the American petroleum institute (API).

Note: Copies may be purchased for personal use from:
American Petroleum Institute
1220 L Street NW
Washington DC 20005

Table 6E
API Document Reference

| Document Number | Title | Incorporated by Reference For |
|------------------|--|-------------------------------------|
| Publication 2517 | Evaporative Loss from External Floating Roof Tanks, 3rd edition, February 1989 | NR 420.02 (33) NR 420.03 (3) (c) |

(6) The following is a document from the American society of mechanical engineers (ASME):

Note: Copies may be purchased for personal use from:
The American Society of Mechanical Engineers
22 Law Drive
Fairfield NJ 07004

Table 6F
ASME Document Reference

| Document Number | Title | Incorporated by Reference For |
|---------------------|--------------------------------|-------------------------------|
| PTC 4.2-1969 (1997) | Test Code for Coal Pulverizers | NR 439.098 (1) (c) |

(7) The following is a document from the international organization for standardization (ISO):

Note: Copies may be purchased for personal use from:
American National Standards Institute
11 West 42nd Street
13th floor
New York NY 10036

Table 6G
ISO Document Reference

| Document Number | Title | Incorporated by Reference For |
|-----------------|--|-------------------------------|
| ISO 9931 (1991) | Coal -- Sampling of Pulverized Coal Conveyed by Gases in Direct Fired Coal Systems | NR 439.098 (1) (c) |

History: Cr. Register, February, 1995, No. 470, eff. 3-1-95; am. (1) (b), Register, April, 1995, No. 472, eff. 5-1-95; r. (1) (c), am. (1) (a), Register, December, 1995, No. 480, eff. 1-1-96; am. (5), Register, January, 1997, No. 493, eff. 2-1-97; am. (5), renum. (1) to (5) to be (2), (3), (4), (5) and (1), cr. (6) and (7), Register, November, 1999, No. 527, eff. 12-1-99.