

12.0

Maintenance and Operations Administrative Guidelines for School Districts and Community Colleges

Appendices

Appendix A: Terms/Definitions

Administrator- The superintendent of schools of a school district, or the president of a community/junior college.

Ancillary Facility- Such facilities as bus garages, warehouses, maintenance, or administrative buildings necessary to provide support services to an educational program.

Approved- To make reference to a nationally-recognized code or organization; to label, endorse, sanction, accredit, or certify.

Asbestos- The asbestiform varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cumingtonitegrunerite); tremolite; and actinolite.

Board- A district school board, a community/junior college board of trustees, or the Board of Trustees for the Florida School for the Deaf and the Blind. The term “board” does not include the State Board of Education.

Building- A structure enclosed with exterior walls or covered by a roof designed for the housing, shelter, enclosure, or support of people, animals, or property of any kind. A portion of the building separated from other portions by a fire wall shall be considered as a separate building.

Building Code- See uniform building code for educational facilities.

Building, Existing- All buildings owned, rented, or leased by a board.

Building, Relocatable- A facility which is not permanently fastened to the ground and designed so it can readily be moved to a new location, either in one piece or in components.

Classroom- An instructional space requiring no special design or equipment and utilized for housing such programs as language arts, social studies, mathematics, and selected vocational programs.

Commissioner- The Commissioner of Education, State of Florida.

Component- Serving as one of the parts of a whole.

Contractor- The individual, firm, or corporation awarded the contract for the work specified.

Criterion- An “evaluative standard” which can be used to measure a project program or measure program components performance impact or effect.

Day Labor Project- One which is constructed by board employees or by contracted labor as set forth in section 235.211, Florida Statutes.

Department- The Department of Education, State of Florida.

Disinfectant- An agent that destroys negative forms or harmful microorganisms but not ordinarily those that are bacterially spored.

Educational Facilities- The buildings and equipment that are built, installed, or established to serve educational purposes and which may be lawfully used.

Educational Plant- Comprises the buildings, equipment, and grounds necessary to accommodate students, faculty, administrators, staff, and the activities of the educational program.

Effectiveness Measures- Indicators which measure the extent to which the goals and objectives of the services in question are being met and the impact of the services.

Energy Account- Conservation and Renewable Energy Construction account as identified in Section 235.435(4)(a), Florida Statutes.

Energy Audit- A survey of a building or complex of buildings conducted by an NECPA certified energy auditor that identifies and describes energy-using systems, determines energy conservation maintenance and operating procedures, and indicates any need for the installation of energy conservation measures.

Existing Facility- See Building, Existing.

External Work Request- A request for work generated outside the maintenance departments work request system.

Germicide- An agent that destroys germs.

Gross Square Footage- Means all net square feet of a facility, plus exterior and interior wall thickness, roof overhangs, covered walks and open malls, and interior circulation. For roof overhangs, figure the square footage as one-third the actual square feet. For covered walks and open malls, figure the square footage as one-half the actual square feet. All interior circulation shall be figured as actual square feet.

Grounds- The term “grounds” includes, but is not limited to, all patios, walls, grassed areas play areas, water, drainage, wooded areas, and parking areas located within the legal boundaries of the educational plant.

Internal Work Order- A work request generated within the maintenance department.

Maintenance and Operations Guidelines- Refers to the 2001 Department of Education Maintenance and Operations Administrative Guidelines for School Districts and Community Colleges. The 2001 maintenance and operations administrative guidelines replace the 1988 edition. Copies are available to public school districts and community/junior colleges upon request.

Maintenance and Operations Survey- A systematic collection of pertinent data and information about the effectiveness of maintenance and custodial services of a specific educational facility.

Maintenance and Repair- The upkeep of property or equipment including, but not limited to, roof or roofing replacement short of complete replacement of membrane or structure; repainting of interior or exterior surface; resurfacing of floors; replacement of glass; repair of hardware; furniture, equipment, and electrical and plumbing fixtures; and site improvement.

Maintenance of Plant- Those activities that are concerned with keeping the grounds, buildings, and equipment at an acceptable level of efficiency.

Maintenance-Emergency- Work requiring immediate action to correct the interruption or breakdown of utilities, or to eliminate hazards to persons or property.

Maintenance-Preventive- That maintenance which is scheduled periodically and consists of systematic examination, lubrication, and adjustment to keep equipment of a facility in proper working condition, and/or to replace component parts of a system to prevent major interruption of services or functions of a facility.

Maintenance-Routine- The recurring day-to-day, periodic, or scheduled work required to preserve or maintain the grounds, buildings, and equipment at their original condition.

Needs Assessment- The process by which maintenance and operations deficiencies are identified and priorities are determined.

Net Square Footage- All enclosed and interior floor areas, measured wall to wall, of a facility, excluding exterior and interior wall thickness, covered walks and open malls, and interior and exterior circulation.

Non-student Occupied Space- Any area planned primarily for use by other than students.

Occupied Building- Any time a building is open to the public or any time a building is occupied by six (6) or more persons.

Open Plan Building- A building which does not have defined permanent corridors and is entirely open or divided by partitions which are easily rearrangeable.

Open Plan Instructional Space- An arrangement of two or more class areas with no permanent partition or wall separation.

Operation of Plant- Consists of activities concerned with keeping the physical plant open and ready for use. Major components of these activities within school buildings, including cleaning, disinfecting, heating, lighting, communications, power, moving furniture, caring for grounds, security, and other such activities as are repeated somewhat regularly on a daily, weekly, monthly, or seasonal basis. Operation of plant does not encompass the repairs and replacement of facilities and equipment.

Plant Management and Maintenance Review- A systematic collection of pertinent data and information about the effectiveness of plant management and maintenance of an educational facility. This review is normally requested by the Director of Maintenance and administered by an outside consultant, or by the State Board of Education, Bureau of Educational Facilities.

Priority Determination- An activity or activities by which the order or urgency of maintenance projects and programs are established. Normally determined outside of the maintenance environment.

Project Priority List (PPL)- One which is listed on a State Board of Education approved list of projects which have been survey recommended, and priority of need has been established by the board.

Productivity Measures- Indicators which relate the output of a maintenance and operations unit to the input required to produce the activity being measured. The ratio indicates how efficiently the service is being provided. Output is measured in terms of “products” or services produced for use outside the maintenance and operations organization. Input is measured in terms of the labor and material required.

Remodeling- To change existing facilities by rearrangement of space and/or of use. The use and occupancy of the spaces may be changed.

Renovation- The rejuvenation or upgrading of existing facilities by installation or replacement of materials and equipment with like materials. The use and occupancy of the spaces remain the same.

Sanitize- The effective bacteriological treatment of visually clean surfaces of equipment, walls, floors, and utensils by an approved process which destroys micro-organisms, including pathogens. The degree of sanitation may approach and include sterilization.

Site- Land occupied or to be occupied by an educational facility or program.

Standard Reporting Forms- Data collection instruments which permit systematic accumulation of actual measurements, files, and other records.

Work Authorization System- The process whereby the educational facility authorizes maintenance and operations work and expenditures.

Work Order- A form which authorizes the expenditures of money for material and labor for a specific project or series of projects. It is the formal method by which maintenance and operations costs are tracked and audited.

Work Order Control- The process by which specific jobs or projects are controlled and accomplished by maintenance and operations supervisory and staff personnel, i.e., those personnel charged with responsibility of “seeing to the doing.”

Work Order Assignment Process- The process whereby a supervisor, foreman, or authorized staff member assigns work to trades, staff, or outside contractor.

Work Request Form- A request for work from an authorized generator.

Work Sampling- The random sampling of observations of a job to determine the percentages of time devoted to the various elements of the job.

Appendix B: Bibliography

Association of Physical Plant Administrators, "**Custodial Staffing Guidelines for Educational Facilities, second edition**," ISBN 1-890956-06-6

Brevard Public Schools, Office of Plant Operations & Maintenance, "**Custodial Standards**," July 1998

California State Department of Education, "**Indoor Air Quality, A Guide for Educators**," 1995

California State Department of Education, "**A Self-assessment Guide for School District Fiscal Policy Teams, Maintenance and Operations**," 1990

California State Department of Education, "**Guide for the Development of a Long-Range Facilities Plan**," 1986

California State Department of Education, "**Administration of Maintenance and Operations in California School Districts: A Handbook for School Administrators and Governing Boards**," 1986

Dillow, Rex, Editor-in-chief, "**Facilities Management, A Manual for Plant Administration, second edition**," Association of Physical Plant Administrators, Virginia, 1989. ISBN 0-913359-50-5

Lewis, Bernard T., "**Facility Manager's Operation and Maintenance Handbook**," McGraw-Hill, New York, NY, 1999.

Florida Association/American Institute of Architects, "**Florida Accessibility Code for Building Construction**," 1994

Florida Building Commission, "**Florida Building Code**" vols. 1A & 1B, 1999

Florida Department of Education, "**Life Cycle Cost Guidelines for Materials and Building Systems for Florida's Educational Facilities**," vol. 1 & 2, 1999

Florida Department of Education, "**Natural Disaster & Crisis Management in School Districts and Community Colleges**," 1997

Florida Department of Education, "**State Requirements for Educational Facilities**," 1999

Florida Department of Education, “**Maintenance and Operations Administrative Guidelines for School Districts and Community/Junior Colleges,**” 1989

Florida Legislature, Office of Program Policy Analysis and Government Accountability, “**Best Financial Management Practice Reviews,**” 2000

Illinois Association of School Boards, “**The New Good School Maintenance, second edition,**” 1984

Lufkin, Peter S., and Robert M. Silsbee, “**The Whitestone Building Maintenance and Repair Cost Reference 1998,**” Whitestone Research, April 1998. ISBN 1084-1741

Middleton, William D., editor-in-chief. “**Facilities Management: A Manual for Plant Administration, third edition,**” Association of Physical Plant Administrators, Virginia. ISBN 0-913359-79-1

United States Environmental Protection Agency, “**The Action Plan for Energy Star Buildings Success,**” June 1998 EPA-430-B-98-004F

References and Resources

Appendix C: References and Resources

American Institute of Steel Construction, Inc.
One East Wacker Drive, Suite 3100
Chicago, IL 60601
Phone: 312-670-2400 www.aisc.org

American National Standards Institute
11 West 42nd Street, 13th Floor
New York, NY 10036
Phone: 212-642-4900 www.ansi.org

American Society of Mechanical Engineers
United Engineering Center
345 East 47th Street
New York, NY 10017
Phone: 800-THE-ASME www.asme.org

American School and University Magazine
9800 Metcalf
Overland Park, KS 66212
Phone: 913-341-1300 www.asumag.com

Arizona School Facilities Board
1700 W. Washington Street
Suite 602
Phoenix, AZ 85007
Phone: 602-542-6501 www.sfb.state.az.us

Association for Facilities Engineering
8180 Corporate Park Drive
Suite 305
Cincinnati, OH 45242
Phone: 513-489-2473 www.afe.org

Association for Higher Education Facilities Officers
1643 Prince Street
Alexandria, VA 22314
Phone: 703-684-1446 www.appa.org

Building Owners and Managers Association
1201 New York Avenue, NW
Suite 300
Washington, DC 20005
Phone: 202-408-2662 www.boma.org

Buildings Magazine
P.O. Box 1888
Cedar Rapids, IA 52406-1888
Phone: 319-364-6167 www.building.com

Council of Educational Facility Planners
9180 E. Desert Cove
Suite 104
Scottsdale, AZ 85260
Phone: 480-391-0840 www.cefpi.com

Education FM
2100 W. Florist Avenue
Milwaukee, WI 35209
Phone: 414-228-7701 www.facilitiesnet.com

Facilities Design and Management
One Penn Plaza, 10th Floor
New York, NY 10119-1198
Phone: 212-615-2717 www.fdm.com

Florida Building Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Phone: 895-487-1824

Florida Center for Community Design and Research
University of South Florida School of Architecture
and Community Design
3702 Spectrum Boulevard
Suite 180
Tampa, FL 33612
Phone: 813-974-4042 www.fccdr.usf.edu

Florida Department of Education
Turlington Building
325 West Gaines Street
Tallahassee, FL 32399-0400 www.firn.edu/doe

Florida Energy Office
2555 Shumard Oak Boulevard
Tallahassee, FL 32399
Phone: 850-488-2475 www.dos.state.fl.us/fgils/agencies/energy.html

Florida School Plant Management Association
Phone: 888-970-1159 www.fspma.com

Florida Solar Energy Center
1679 Clearlake Road
Cocoa, FL 32922-5703
Phone: 321-638-1000 www.fsec.ucf.edu

Institute for Business and Home Safety
1408 North Westshore Boulevard
Suite 208
Tampa, FL 33607
Phone: 813-286-3400 www.ibhs.org

International Facility Management Association
1 East Greenway Plaza
Suite 1100
Houston, TX 77046
Phone: 713-623-4362 www.ifma.org

International Sanitary Supply Association
7373 North Lincoln Avenue
Lincolnwood, IL 60712
Phone: 800-225-4772 www.issa.com

National Association of State Energy Officials
1414 Prince Street
Suite 200
Alexandria, VA 22314
Phone: 703-299-8800 www.naseo.org

National Clearinghouse for Educational Facilities
1090 Vermont Avenue, NW
Suite 700
Washington, DC 20005
Phone: 202-833-4000 www.edfacilities.org

National Education Association
1201 16th Street, NW
Washington, DC 20036
Phone: 202-833-4000 www.nea.org

National Fire Protection Association
One Batterymarch Park
Quincy, MA 02269-9101
Phone: 617-770-3000 www.nfpa.org

National Lighting Bureau
8811 Colesville Road
Suite G106
Silver Spring, MD 20910
Phone: 301-587-9572 www.nlb.org

Occupational Safety and Health Administration
Frances Perkins Dept. of Labor Building
200 Constitution Ave. NW
Washington, DC 20210
Phone: 202-693-2000 www.osha.gov

Southern Building Code Congress International, Inc.
900 Montclair Road
Birmingham, AL 35213-1206
Phone: 205-591-1853 www.sbcci.org

School Planning and Management Magazine
330 Progress Road
Dayton, OH 45499
Phone: 937-847-5900 www.spmmag.com

12.4

Applicable Regulatory Requirements

Appendix D: Applicable Regulatory Requirements

The following list of code sections are deemed relevant to the normal operation and maintenance of physical plants in Florida school districts and community colleges. The listed codes and standards are current at the time these guidelines are written and are subject to change. Facilities administrators at each institution should acquire adequate copies of these publications for use by affected staff and establish policies for compliance. Each department should also acquire copies of subsequent revisions, addenda, and updates.

1. National
 - National Fire Protection Association
 - A. NFPA
 - 1) 10 Portable Extinguishers
 - 2) 11 Foam Ext. Systems
 - 3) 12 Carbon Dioxide Systems
 - 4) 13 Sprinkler Systems
 - 5) 13A Sprinkler Maintenance
 - 6) 13E Sprinkler Prop., F. D. Operations
 - 7) 14 Standpipe, Hose Systems
 - 8) 20 Centrifugal Fire Pumps
 - 9) 24 Private Fire Service Mains
 - 10) 30A Automotive and Marine Service Station Code
 - 11) 31 Oil Burning Equipment
 - 12) 37 Combustion Engines
 - 13) 40 Motion Picture Film
 - 14) 45 Labs Using Chemicals¹
 - 15) 46 Forest Products, Storage
 - 16) 50 Bulk Oxygen Systems
 - 17) 51 Welding and Cutting
 - 18) 51B Welding Processes
 - 19) 52 CNG Vehicular Fuel Systems
 - 20) 54 National Fuel Gas Code
 - 21) 56F Nonflammable Medical Gases
 - 22) 56HM Home Respiratory Therapy
 - 23) 58 LP-Gas Storage Use
 - 24) 59 HP-Gas, Utility Plants
 - 25) 59A LN-Gas, Storage, Handling
 - 26) 70 National Electrical Code

- 27) 70B Electrical Equipment Maintenance
- 28) 70E Employee Electrical Safety
- 29) 71 Central Station Sig.
- 30) 72A Local Protect. System
- 31) 72B Auxiliary Sig. System
- 32) 72C Remote Station System
- 33) 72D Proprietary Stg. System
- 34) 72E Auto. Fire Detectors
- 35) 72F Emergency Voice/Alarm Comm. Systems
- 36) 75 Electronic Computer System
- 37) 78 Lightning Protection System
- 38) 79 Electrical Standards for Industrial Machinery
- 39) 80 Fire Doors, Windows
- 40) 85A Single Burner Boiler-Furnaces
- 41) 85B Gas Multi-burner Boiler
- 42) 85D Oil Multi-burner Boiler
- 43) 86 Ovens and Furnaces
- 44) 88A Parking Structures
- 45) 88B Repair Garages
- 46) 90A Air Conditioning Systems
- 47) 90B Warm Air Heating, Air Conditioning
- 48) 91 Blower and Exhaust System
- 49) 96 Vapor Removal Cooking Equipment
- 50) 97M Heating Terms, Glossary
- 51) 99 Health Care Facilities
- 52) 101 Life Safety Code
- 53) 110 Emergency and Standby Power System
- 54) 171 Public Fire Safety Symbols
- 55) 172 Fire Safety Symbols for Architectural and Engineering Drawings
- 56) 203M Roof Coverings
- 57) 204M Smoke, Heat Venting
- 58) 231C Rack Storage of Materials
- 59) 241 Standard for Safeguarding Construction, Alteration, and Demolition Operations
- 60) 253 Flooring Radiant Panel Test
- 61) 664 Wood Processing, Woodworking
- 62) 901 Uniform Coding for F. P.
- 63) 910 Libraries and Library Collections
- 64) 911 Museums and Museum Collection
- 65) Others as they may apply.

2. State

- A. Florida Building Code, in its entirety.

3. Standard Building Codes.

- A. Standard Mechanical Code
- B. Standard Gas Code
- C. Elevator Safety Code

Those sections of OSHA 29 CFR that are applicable to maintenance and operations practices at the time this publication is written include the following:

Part 1910 – Occupational Safety and Health Standards

Subpart A – General

- 1910.1 Purpose and scope
- 1910.2 Definitions
- 1910.3 Amendments to this part
- 1910.5 Applicability of standards

Subpart B – Adoption and Extension of Established Federal Standards

- 1910.11 Scope and purpose
- 1910.12 Construction work
- 1910.19 Special provisions for air contaminants

Subpart D – Walking - Working Surfaces

- 1910.19 Manually propelled mobile ladder stands and scaffolds
- 1910.21 Definitions
- 1910.22 General requirements
- 1910.23 Guarding floor and wall openings
- 1910.24 Fixed industrial stairs
- 1910.25 Portable wooden ladders
- 1910.26 Portable metal ladders
- 1910.27 Fixed ladders
- 1910.28 Safety requirements for scaffolding
- 1910.30 Other working surfaces

Subpart E – Means of Egress

- 1010.35 Definitions
- 1910.36 General requirements
- 1910.37 Means of egress, general
- 1910.38 Employee emergency plans and fire prevention plans

Subpart F – Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms

- 1910.66 Powered platforms for building maintenance
- 1910.67 Vehicle-mounted elevating and rotating work platforms
- 1910.68 Manlifts

Subpart G - Occupational Health and Environmental Control

- 1910.94 Ventilation
- 1910.95 Occupational noise exposure

Subpart H – Hazardous materials

- 1910.101 Compressed gasses (general requirements)
- 1910.102 Acetylene
- 1910.103 Hydrogen
- 1910.104 Oxygen
- 1910.105 Nitrous oxide
- 1910.106 Flammable and combustible liquids
- 1910.107 Spray finishing using flammable and combustible materials
- 1910.119 Process safety management of highly hazardous chemicals
- 1910.120 Hazardous waste operations and emergency response

- Subpart I – Personal Protective Equipment**
 - 1910.132 General requirements
 - 1910.133 Eye and face protection
 - 1910.134 Respiratory protection
 - 1910.135 Head protection
 - 1910.136 Foot protection
 - 1910.137 Electrical protective devices
 - 1910.138 Hand protection
- Subpart J – General Environmental Controls**
 - 1910.141 Sanitation
 - 1910.144 Safety color code for marking physical hazards
 - 1910.145 Specifications for accident prevention signs and tags
 - 1910.146 Permit required confined spaces
- Subpart K - Medical and First Aid**
 - 1910.151 Medical services and first aid
- Subpart L – Fire Protection**
 - 1910.154 Scope, application and definitions
 - 1910.157 Portable fire extinguishers
 - 1910.158 Standpipe and hose systems
 - 1910.159 Automatic sprinkler systems
 - 1910.160 Fixed extinguishing systems, general
 - 1910.161 Fixed extinguishing systems, dry chemical
 - 1910.162 Fixed extinguishing systems, gaseous agent
 - 1910.163 Fixed extinguishing systems, water spray and foam
 - 1910.164 Fire detection systems
 - 1910.165 Employee alarm systems
- Subpart M – Compressed Gas and Compressed Air Equipment**
 - 1910.169 Air receivers
- Subpart N – Materials Handling and Storage**
 - 1910.176 Handling material – general
 - 1910.177 Servicing multi-piece and single piece rim wheels
 - 1910.178 Powered industrial trucks
 - 1910.184 Slings
- Subpart O – Machinery and Machine Guarding**
 - 1910.211 Definitions
 - 1910.212 General requirements for all machines
 - 1910.213 Woodworking machinery requirements
 - 1910.215 Abrasive wheel machinery
- Subpart P – Hand and Portable Powered Tools and Other Hand-Held Equipment**
 - 1910.241 Definitions
 - 1910.242 Hand and portable powered tools and equipment
 - 1910.243 Guarding of portable powered tools
 - 1910.244 Other portable powered tools and equipment
- Subpart Q – Welding, Cutting and Brazing**
 - 1910.251 Definitions
 - 1910.252 General requirements
 - 1910.253 Oxygen-fuel gas welding and cutting
 - 1910.254 Arc welding and cutting

Subpart S – Electrical

- 1910.301 Introduction**
- 1910.302 Electric utilization systems**
- 1910.303 General requirements**
- 1910.304 Wiring design and protection**
- 1910.305 Wiring methods, components and equipment for general use**
- 1910.306 Specific purpose equipment installations**
- 1910.307 Hazardous locations**
- 1910.308 Special systems**
- 1910.331 Safety-related work practices – scope**
- 1910.332 Training**
- 1910.333 Selection and use of work practices**
- 1910.334 Use of equipment**
- 1910.335 Safeguards for personal protection**
- 1910.399 Definitions**

Subpart Z – Toxic and Hazardous Substances

- 1910.1001 Air contaminants**
- 1910.1001 Asbestos**
- 1910.1020 Access to employee exposure and medical records**
- 1910.1030 Bloodborne pathogens**
- 1910.1200 Hazard communication**
- 1910.1201 Retention of DOT markings, placards and labels**
- 1910.1450 Occupational exposure to hazardous chemicals in laboratories**

Part 1926 – Safety and Health Regulations for Construction

Subpart A - General

- 1926.1 Purpose and scope**
- 1926.2 Variances from safety and health standards**
- 1926.3 Inspections – right of entry**
- 1926.4 Rules of practice for administrative adjudications for enforcement of safety and health standards**

Subpart B – General Interpretations

- 1926.10 Scope of subpart**
- 1926.16 Rules of construction**

Subpart C – General Safety and Health Provisions

- 1926.20 General safety and health provisions**
- 1926.21 Safety training and education**
- 1926.22 Recording and reporting injuries**
- 1926.23 First aid and medical attention**
- 1926.24 Fire protection and prevention**
- 1926.25 Housekeeping**
- 1926.26 Illumination**
- 1926.27 Sanitation**
- 1926.28 Personal protective equipment**
- 1926.29 Acceptable certifications**

- 1926.32 Definitions
- 1926.33 Access to employee exposure and medical records
- 1926.34 Means of egress
- 1926.35 Employee emergency action plans
- Subpart D - Occupational Health and Environmental Controls**
 - 1926.50 Medical services and first aid
 - 1926.51 Sanitation
 - 1926.52 Occupational noise exposure
 - 1926.55 Gases, vapors, fumes, dusts and mists
 - 1926.56 Illumination
 - 1926.57 Ventilation
 - 1926.59 Hazard communication
 - 1926.61 Retention of DOT markings, placards and labels
 - 1926.62 Lead
 - 1926.64 Process safety management of highly hazardous chemicals
 - 1926.65 Hazardous waste operations and emergency response
 - 1926.66 Criteria for design and construction of spray booths
- Subpart E – Personal Protective and Life Safety Equipment**
 - 1926.95 Criteria for personal protective equipment
 - 1926.96 Occupational foot protection
 - 1926.100 Head protection
 - 1926.101 Hearing protection
 - 1926.102 Eye and face protection
 - 1926.103 Respiratory protection
 - 1926.104 Safety belts, lifelines and lanyards
 - 1926.105 Safety nets
 - 1926.106 Working over or near water
 - 1926.107 Definitions applicable to this subpart
- Subpart F – Fire Protection and Prevention**
 - 1926.150 Fire protection
 - 1926.151 Fire prevention
 - 1926.152 Flammable and combustible liquids
 - 1926.153 Liquefied petroleum gas (LP gas)
 - 1926.154 Temporary heating devices
 - 1926.155 Definitions applicable to this subpart
 - 1926.156 Fixed extinguishing systems, general
 - 1926.157 Fixed extinguishing systems, gaseous agent
 - 1926.158 Fire detection systems
 - 1926.159 Employee alarm systems
- Subpart G – Signs, Signals and Barricades**
 - 1926.200 Accident prevention signs and tags
 - 1926.201 Signaling
 - 1926.202 Barricades
 - 1926.203 Definitions applicable to this subpart.
- Subpart H – Materials Handling, Storage, Use and Disposal**
 - 1926.250 General requirements for storage
 - 1926.251 Rigging equipment for materials handling
 - 1926.252 Disposal of waste materials

Subpart I – Tools – Hand and Power

- 1926.300 General requirements
- 1926.301 Hand tools
- 1926.302 Power operated hand tools
- 1926.303 Abrasive wheels and tools
- 1926.304 Woodworking tools
- 1926.305 Jacks – lever and ratchet, screw and hydraulic
- 1926.306 Air receivers
- 1926.307 Mechanical power-transmission apparatus

Subpart J – Welding and Cutting

- 1926.350 Gas welding and cutting
- 1926.351 Arc welding and cutting
- 1926.352 Fire prevention
- 1926.353 Ventilation and protection in welding, cutting, heating

Subpart K – Electrical

- 1926.400 Introduction
- 1926.402 Applicability
- 1926.403 General requirements
- 1926.404 Wiring design and protection
- 1926.405 Wiring methods, components and equipment for general use
- 1926.406 Specific purpose equipment and installations
- 1926.407 Hazardous (classified) locations
- 1926.408 Special systems
- 1926.416 General requirements
- 1926.417 Lockout and tagging of circuits
- 1926.431 Maintenance of equipment
- 1926.432 Environmental deterioration of equipment
- 1926.441 Battery locations and battery charging
- 1926.449 Definitions applicable to this subpart

Subpart L – Scaffolds

- 1926.450 Scope, application and definitions applicable to this subpart
 - 1926.451 General requirements
 - 1926.452 Additional requirements applicable to specific types of scaffolds
 - 1926.453 Aerial lifts
 - 1926.454 Training requirements
- Appendix A, B, C, D, & E to Subpart L

Subpart M – Fall Protection

- 1926.500 Scope, application, and definitions applicable to this subpart
 - 1926.501 Duty to have fall protection
 - 1926.502 Fall protection systems criteria and practices
 - 1926.503 Training requirements
- Appendix A, B, C, D, & E to Subpart M

Subpart N – Cranes, Derricks, Hoists, Elevators and Conveyors

- 1926.550 Cranes and derricks
- 1926.552 Material hoists, personnel hoists and elevators
- 1926.554 Overhead hoists
- 1926.555 Conveyors

Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations

1926.600 Equipment

1926.601 Motor vehicles

1926.602 Material handling equipment

1926.604 Site clearing

1926.606 Definitions applicable to this subpart

Subpart P – Excavations

1926.650 Scope, application and definitions applicable to this subpart

1926.651 Specific excavation requirements

1926.652 Requirements for protective systems

Subpart Q – Concrete and Masonry Construction

1926.700 Scope, application and definitions applicable to this subpart

1926.701 General requirements

1926.702 Requirements for equipment and tools

1926.703 Requirements for cast-in-place concrete

1926.704 Requirements for pre-cast concrete

1926.706 requirements of masonry construction

Subpart R – Steel Erection

1926.750 Flooring requirements

1926.751 Structural steel assembly

1926.752 Bolting, riveting, fitting-up and plumbing-up

1926.753 Safety nets

Subpart T – Demolition

1926.850 Preparatory operations

1926.851 Stairs, passageways and ladders

1926.852 Chutes

1926.853 Removal of materials through floor openings

1926.854 Removal of walls, masonry sections and chimneys

1926.855 Manual removal of floors

1926.856 Removal of walls, floors and material with equipment

1926.857 Storage

1926.858 Removal of steel construction

1926.859 Mechanical demolition

Subpart V – Power Transmission and Distribution

1926.950 General requirements

1926.951 Tools and protective equipment

1926.952 Mechanical equipment

1926.953 Materials handling

1926.954 Grounding for protection of employees

1926.955 Overhead lines

1926.956 Underground lines

1926.957 Construction in energized substations

1926.959 Lineman's body belts, safety straps and lanyards

1926.960 Definitions applicable to this subpart

Subpart X – Stairways and Ladders

1926.1050 Scope, application and definitions applicable to this subpart

1926.1051 General requirements

1926.1052 Stairways

1926.1053 Ladders

1926.1060 Training requirements

Subpart Z – Toxic and Hazardous Substances

1926.1101 Asbestos

1926.1102 Coal tar pitch volatiles; interpretation of term

1926.1103 13 Carcinogens

12.5

Maintenance, Operations, and Ground Inspections Matrix

Appendix E: Maintenance, Operations, and Grounds Inspections Matrix

Inspection Type	Frequency	Service Provider	Regulatory Compliance
Building envelope	Annually	In-house staff	
Roofs	Annually	Roof inspector	
Sprinkler systems	Quarterly (flow test), Monthly	Certified Contractor	SREF NFPA 13 NFPA 25
Emergency generators	Monthly (operational check under load) Weekly (visual)	In-house staff	
Security system/ alarm	Monthly	In-house staff	
Smoke/heat detectors	Semi-annually	In-house staff	NFPA 72
Elevators (certification)	Annually	Contract service provider	State
Fire alarm systems	Quarterly to annually	Certified alarm inspector	NFPA 72
Emergency lighting/ battery packs	Monthly	In-house staff	
Lighting/ relamping	Semi-annually As needed	In-house staff	
Switchboards	Every 3-years	Contract service provider	

Inspection Type	Frequency	Service Provider	Regulatory Compliance
Fume hoods	Annually	Contract service provider	
Irrigation systems	Semi-annually	In-house staff	
Water Heaters	Annually	In-house staff	
Fire extinguishers	Annually	Contract service provider	SREF NFPA 10
	Weekly	In-house staff	
Vehicles/heavy equipment	Daily	In-house staff	
Relocatable classrooms	During construction	Building inspector	SREF
	Annually	In-house staff	
Fire safety	Annually	Certified fire safety inspector	SREF
Water heaters	Annually	In-house staff	
Grounds (play equipment, grandstands, etc.)	Annually	In-house staff	SREF
Cross connection control	Annually	Certified person	DEP
Grandstands and bleachers	Biannual	Structural engineer	SREF
Public shelters	Annually	District staff	SREF
	Every 5 years	Structural engineer	SREF

Additional Contributors**Appendix F: Additional Contributors**

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The School Board of Broward County

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Hillsborough County Public Schools

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South Florida Community College

Norman Hughes, Maintenance Director
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Greg Jones, General Supervisor
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