

DEB Notice 120108 – Virginia Energy Conservation & Environmental Standards

Effective 12/01/2008

Add the following to the Construction and Professional Services Manual

Section 709.0 Energy Conservation and Environmental Performance

State agencies and A/Es shall assure that new construction, renovation, and maintenance of building is performed in accord with the following minimum standards for energy conservation and environmental performance.

Section 709.1 Virginia Energy Conservation and Environmental Performance Standards

All new and renovated state-owned facilities, if the renovations are in excess of 50 percent of the structure's assessed value, that are over 5,000 gross square feet shall be designed and constructed consistent with either method A or B of the following energy conservation and environmental performance standards.

A. Leadership in Energy and Environmental Design (LEED)

Obtain a minimum score of Certified (26/69)

Demonstrate compliance by one of the following methods:

LEED certification submitted to BCOM

Documentation provided to a 3rd party approved by BCOM to determine LEED certification and then that result submitted to BCOM

Documentation provided to BCOM to determine LEED certification

B. Virginia Energy Conservation and Environmental Performance Standards

Energy Performance Data

Provide a design that is a 30% improvement over baseline performance for ASHRAE/IESNA Standard 90.1-2004, Energy Standards for Buildings except Low-Rise Residential Buildings

Commissioning Criteria and Commissioning Report

Conduct a systematic process of verifying and documenting that building energy systems and subsystems perform interactively according to the design intent and owner's operational needs. ASHRAE Guideline 1 – 1996, The HVAC Commissioning Process provides an outline for the commissioning process for each phase of the design.

Atmospheric Emissions Controls

Obtain a minimum score as defined in the attached score sheet for the Emissions and Storage of Hazardous Materials Section the *Green Building Initiative GBI Proposed National Standard 01-2008 Green Building Assessment Protocol for Commercial Buildings*. (Section 11 Emissions and Storage of Hazardous Materials).

Construction Pollution Prevention

Obtain a minimum score as defined in the attached score sheet for the Site Disturbance and Erosion section of the *Green Building Initiative GBI Proposed National Standard 01-2008 Green Building Assessment Protocol for Commercial Buildings*. (Section 7 Site).

Water Conservation

Implement the required number as defined in the attached score sheet of the Best Management Practices (BMP) for water conservation at (federal) facilities. Available at
http://www1.eere.energy.gov/femp/water/water_bmp.html

[BMP # 1](#) - Water Management Planning

[BMP # 2](#) - Information and Education Programs

[BMP # 3](#) - Distribution System Audits, Leak Detection and Repair

[BMP # 4](#) - Water-Efficient Landscaping

[BMP # 5](#) - Water-Efficient Irrigation

[BMP # 6](#) - Toilets and Urinals

[BMP # 7](#) - Faucets and Showerheads

[BMP # 8](#) - Boiler/Steam Systems

[BMP # 9](#) - Single-Pass Cooling Equipment

[BMP #10](#) - Cooling Tower Management

[BMP #11](#) - Commercial Kitchen Equipment

[BMP #12](#) - Laboratory/Medical Equipment

[BMP #13](#) - Other Water Use

[BMP #14](#) - Alternate Water Sources

Recycling Materials, Resources, and Waste Management

Obtain a minimum score as defined in the attached score sheet for the Resource Materials Section of the *Green Building Initiative GBI Proposed National Standard 01-2008 Green Building Assessment Protocol for Commercial Buildings*. (Section 10 Resources/Materials).

Indoor Environmental Quality

Comply with all of the following ASHRAE Standards

[ASHRAE Standard 52—Method of Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter](#)

[ASHRAE Standard 55—Thermal Environmental Conditions for Human Occupancy](#)

[ASHRAE Standard 62—Ventilation for Acceptable Indoor Air Quality:](#)

Operation and Maintenance Manuals

Provide a minimum of three (3) complete sets to the owner for each facility constructed. Provide instruction and training

Demonstrate compliance by one of the following methods:

Documentation provided to a 3rd party approved by BCOM to determine certification and then that result submitted to BCOM

Documentation provided to BCOM to determine certification

Section 709.2 Compact Fluorescent Lamps

Design of construction and renovation projects shall use CFLs when practical considering program criteria and aesthetics.

Maintenance of building is performed replace incandescent with compact fluorescent bulbs where practical.

Virginia Energy Conservation and Environmental Performance Standards Score Sheet

Energy Performance

Design is 30% improvement over ASHRAE / IESNA Standard 90.1-2004

Commissioning Criteria and Commissioning Report

Criteria defined and building commissioned / report generated

Atmospheric Emissions Controls

Heating

Obtain 18 points as defined by Section 11.1 Heating Equipment
either use path A or B

Cooling

Obtain 21 points as defined by Section 11.1 Cooling Equipment
either use path A or B

Storage of Hazardous Materials

Obtain 6 points as defined by Section 11.3 Storage for Hazardous Materials

Construction Pollution Prevention

Obtain 6 points as defined by Section 7.2.1 Site Disturbance and Erosion

Water Conservation

Six or more BMP strategies implemented

Recycling Materials Resources, and Waste Management

Obtain 12 points as defined by Section 10.1 Assemblies Prescriptive Path

Obtain 10 points as defined by Section 10.2 Furnishing, Finishes
and Fit-outs Prescriptive Path

Indoor Environmental Quality

Complied with referenced ASHRAE Standards

Operation and Maintenance Manuals

Provided to Owner manuals and training

All references are to the GBI Proposed American National Standard 01-2008P
April 25, 2008 available at <http://www.thegbi.org/home.asp>

Alternate compliance may be submitted for review at Preliminary Design