

HIGH PERFORMANCE BUILDING DESIGN, CONSTRUCTION AND OPERATIONS

Environmentally sustainable design, construction and operational practices benefit Loudoun County Public Schools (LCPS) facilities by increasing or improving energy efficiency, interior comfort and occupant productivity, as well as reducing operation and maintenance costs. The development of LCPS Best Management Practices (BMP) is accomplished by assessing and integrating sustainable methods, building components and technologies into every aspect of campus development and operational life cycle.

A. Best Management Practices (BMP). LCPS should implement sustainable practices in environmental quality, water and energy consumption, products, materials and waste management in existing, as well as new facilities and school renovation projects whenever reasonably possible. Implementation of LCPS BMP shall be consequent to continual evaluation of performance and the dynamic industry guidelines and recommendations. Particular standards or practices may be applied or adopted in whole or in part as provided in publications such as:

1. United States Environmental Protection Agency (EPA) -Designed to Earn the ENERGY STAR Program (new buildings) and ENERGY STAR Certification Program (existing buildings)
2. United States Department of Energy - National Best Practices Manual for Building High Performance Schools
3. Virginia Department of Education - Virginia Public School Facilities Guidelines
4. American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) - Advanced Energy Design Guide for K-12 School Buildings
5. Green Globe Design - Green Building Initiative
6. LEED (Leadership in Energy & Environmental Design) - LEED for Schools
7. The Collaborative for High Performance Schools - Best Practices Manual

LCPS shall consider new sustainable methods and practices, selected and incorporated based on architectural and engineering evaluations and studies.

Independent verification of LCPS BMP shall be performed during the Pre-Construction, Construction and Post-Construction phases. An independent Commissioning Agent (Cx) shall verify incorporation of design parameters by architectural and engineering professional service contractors. Further, the Cx shall verify compliance with BMP design during construction. Facility operations and systems performance shall be monitored, measured and verified via the EPA ENERGY STAR Program.

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B. Energy Conservation

1. LCPS is committed to the conservation of energy and water resources while maintaining safety, education and productivity throughout the school system.
2. Reductions in energy and water consumption result in positive environmental impact, extend the life of equipment, produce reductions in utility costs and increase funds available for resources in the classroom.
3. LCPS will ensure that every effort is made to conserve energy while exercising sound financial management. The application of processes, services, procedures or systems will be evaluated for efficiency and cost effectiveness. In addition, LCPS will make decisions on processes, services or systems through implementation of BMP that lead to ENERGY STAR building certifications.
4. LCPS will employ strategies that reduce potable water usage and incorporate established water conservation standards for plumbing fixtures, faucets and equipment. Increased efficiency of water consuming fixtures and equipment will reduce the demand on water from reservoirs, groundwater, lakes and streams.
5. The judicious use of all energy and water using systems of each campus will be the responsibility of all LCPS facility users and all are expected to ensure that an efficient posture is maintained on a daily basis.

[Former Policies 6-41 and 6-42]

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