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SECTION I. MINIMUM REQUIREMENTS

A. PROHIBITED PRODUCTS

1. General
 - a. Any lighting product (lamp, fixture, luminaire, retrofit kit or driver) that does not meet the requirements listed below.
 - b. Non- Light Emitting Diode luminaires or fixtures.
 - c. Any exit sign that is not a Light Emitting Diode (LED) or code-approved photoluminescent.
 - d. General-purpose incandescent lamps, compact fluorescent lamps (CFLs) and halogen lamps, except when an LED alternative is determined to be unavailable. *See list of prohibited incandescent and halogen lamps below.*
2. Ballasts
 - a. Magnetic fluorescent ballasts.
 - b. Mercury vapor and low-pressure sodium High Intensity Discharge (HID) ballasts.
 - c. Probe-start metal halide HID ballasts (except for those designed to power lamps over 1000 watts).
3. Fluorescent Lamps
 - a. Fluorescent lamps that do not comply with Environment Article §§6-905, 6-905.4, Annotated Code of Maryland.
 - b. Fluorescent lamps with a Color Rendering Index (CRI) of less than 80.
4. Halogen and Incandescent Lamps
 - a. Exit sign lamps must not use halogen or incandescent lamps.
 - b. Lamps with a medium screw base except appliance, stage and studio, miniature, decorative, and clear light bulbs needed for historic fixtures.
 - c. All A19, A21, and PAR38 lamps except clear light bulbs needed for historic fixtures.
 - d. MR16 lamps, except those that use halogen infrared (HIR) technology.
 - e. Other types of lamps identified by the Maryland Green Purchasing Committee based on energy efficiency or toxicity concerns.
5. High-Intensity Discharge Lamps
 - a. Mercury vapor and low-pressure sodium (all wattages).
 - b. Probe start metal halides (except wattages exceeding 1000 watts).

B. LIGHT-EMITTING DIODES (LEDs)

1. LEDs are the preferred lighting technology and are recommended over other lighting products.
2. All LED lamps, retrofit kits, luminaires, and fixtures (except miniature LEDs and LED exit signs) must be:
 - a. On the US Department of Energy's and Environmental Protection Agency's (EPA) criteria for use of the ENERGY STAR trademark label (ENERGY STAR Program certification list can be accessed at https://www.energystar.gov/products/light_fixtures); or
 - b. On the DesignLights Consortium (DLC) Qualified Products List (QPL), which can be accessed at <https://designlights.org/qpl/>. *Products listed DLC Premium are preferred.*
3. All exterior LED luminaires shall be fully shielded to minimize light pollution.
4. All LED drivers must have a minimum rated life of 50,000 hours and comply with the European Union's Restriction of Hazardous Substances (RoHS) Directive.

C. EXIT SIGNS

1. All exit signs must be:
 - a. LED lamps; or
 - b. Code-approved photo-luminescent (non-power using)

D. LIMITED USE LIGHTING PRODUCTS

Fluorescent lamps, HID lamps, and ballasts are considered limited use lighting products and shall only be used when LED equipment is not a practical solution or LED replacements do not exist. Vendors must only offer limited use lighting products that meet the following minimum requirements:

1. Fluorescent Lamps
 - a. All fluorescent lamps must have a CRI of 80 or higher.
 - b. Four-foot linear T8 fluorescent lamps must have a minimum rated life of 24,000 hours when tested on instant start ballasts with 3-hour starts.
 - c. All other T8 lamps must have a minimum rated life of 18,000 hours when tested on instant start ballasts with 3-hour starts.
 - d. All T5 fluorescent lamps must have a minimum rated life of 30,000 hours when tested on programmed start ballasts with 3-hour starts.
 - e. Fluorescent lamps that are labeled Toxicity Characteristic Leaching Procedure (TCLP) compliant or RoHS-compliant are preferred.
2. High-Intensity Discharge (HID) Lamps
 - a. All HID lamps must be either metal halide (ceramic metal halides preferred) or high-pressure sodium (HPS).
 - b. HID lamps that are labeled TCLP-compliant or RoHS-compliant are preferred.
3. Ballasts
 - a. All fluorescent ballasts must be electronic.
 - b. All electronic ballasts must be RoHS-compliant.
 - c. All HID ballasts must be designed to operate either metal halide lamps or high-pressure sodium (HPS) lamps. Probe-start ballasts are allowed only when they are designed to operate metal halide lamps over 1000 watts. Ballasts designed to operate lower-wattage metal halide lamps must use pulse start technology, which is energy efficient.

E. OUTDOOR LIGHTING

1. Luminaires must be designed to maximize energy conservation and to minimize light pollution, glare, and light trespass.
2. Illumination produced by the luminaire must be the minimum illumination necessary for the intended purpose of the lighting.
3. For a luminaire with an output of more than 1,800 lumens, the luminaire must be a restricted uplight luminaire.
4. All outdoor lighting must have a correlated light temperature less than or equal to 3000 Kelvins, per recommendations from the American Medical Association.

F. BIRD SAFE BUILDING PRACTICES

1. Except where full operation of building lighting is documented as necessary, including for public safety or other purposes, interior and exterior lighting shall be appropriately shielded and minimized from midnight to dawn each day:
 - a. from March 1 through May 31, both inclusive; and
 - b. from August 1 through October 31, both inclusive.
2. The use of automatic control technologies, which may include timers, photosensors, infrared detectors, and motion detectors, shall be used to reduce lighting in and around State buildings, unless required for public safety or other purposes (as determined by a State agency).

G. END-OF-LIFE MANAGEMENT

1. All lighting equipment recycled under this contract shall be managed by an authorized lamp, ballast or electronic waste recycling company.
2. Pursuant to State Finance and Procurement Article §14–415 of the Annotated Code of Maryland, contractors shall use recyclers that are certified by either e-Stewards (<http://e-stewards.org/>) or R2 (<https://sustainableelectronics.org/recyclers>).
3. Mercury-Added Fluorescent and HID Lamps
 - a. Mercury-added fluorescent and HID lamps shall be managed in accordance with U.S. EPA standards and State environmental laws to minimize the release of mercury into the environment.
 - b. Mercury-added fluorescent and HID lamps that have been replaced shall not be installed or retrofitted in another location for reuse.

END OF SECTION I.

SECTION II. RECOMMENDATIONS

A. LIGHT-EMITTING DIODES (LEDs)

1. The Maryland Green Purchasing Committee recommends replacing an old fixture with a new fixture, whenever possible. Use of an LED retrofit kit is recommended as a secondary option. Installation of tubular LEDs (TLEDs) and other types of LED replacement lamps in an existing non-LED fixture is recommended only when the first two options are not technically feasible.
2. Products that are approved by the International Dark Sky Association (IDA) are preferred. A list of IDA approved products can be found at: https://darksky.org/what-we-do/darksky-approved/darksky-approved-luminaires-program/luminaires/#/quick_search

B. TRANSPORTATION

1. To promote fuel efficiency and reduce greenhouse gases and air pollution, the Contractor is encouraged to use a SmartWay Transport/Carrier Partner for the shipment or transport of products. A list of SmartWay Transport partners can be found here: <https://www.epa.gov/smartway/smartway-partner-list>.

C. UTILITY ENERGY EFFICIENCY REBATE PROGRAMS

1. Vendors are strongly encouraged to promote the use of LED lighting products that are eligible for utility energy-efficiency rebates. These programs incentivize lighting products that are listed on the ENERGY STAR Certification List or the DesignLights Consortium (DLC) Qualified Product List (QPL).

END OF SECTION II.

SECTION III. SUBMITTAL REQUIREMENTS

A. TECHNICAL SUBMISSION

Bidders/Offerors shall provide the following documents with their response:

1. Proof of applicable required certifications listed in Section I.
 - a. This may include:
 - (1) link to the certifier's website,
 - (2) the [UL SPOT](#) website, or
 - (3) the [Ecomedes](#) website.
 - b. Bidders/offerors who suggest products that are not certified but meet the energy efficiency requirement shall provide a list of such products with their bids/offers. That list must include each product's energy efficiency information.
2. Description of applicable sustainable practices related to the products or services provided.

B. REFERENCES

A bidder or offeror shall include the sustainable practices it employed during the contract period for each listed reference.

END OF SECTION III.

SECTION IV. ENVIRONMENTALLY PREFERABLE PURCHASING LANGUAGE

A. ENVIRONMENTALLY PREFERABLE PURCHASING

The State of Maryland is committed to purchasing environmentally preferable products and services (EPPs). Maryland's State Finance & Procurement Article §14-410 defines environmentally preferable purchasing as "the procurement or acquisition of goods and services that have a lesser or reduced effect on human health and the environment when compared with competing goods or services that serve the same purpose."

Accordingly, Bidders/Offerors are strongly encouraged to offer EPPs to fulfill this contract, to the greatest extent practicable.

B. MARYLAND'S GREEN PURCHASING REPORTING REQUIREMENTS

The Contractor shall submit quarterly sales data to the State over the life of this contract. This information must include details about the recycled content, third-party sustainability certifications, and other environmental attributes of products and services provided under the contract.

To facilitate consistent reporting, the Contractor must use a standardized Vendor Green Sales Report template for the quarterly reporting, which the State will provide.

By submitting a response to this solicitation, the Bidder/Offeror acknowledges a commitment to submitting the quarterly Vendor Green Sales Report to the State. Any vendor who fails to submit the quarterly report may be out of compliance and, therefore, may receive a cure notice from the Procurement Officer.

C. ENVIRONMENTAL CLAIMS

All environmental benefit claims made by the Contractor concerning products or services offered on this contract must be consistent with the [Federal Trade Commission's Guidelines for the Use of Environmental Marketing Claims](#).

END OF SECTION IV.

SECTION V. LEGISLATION, STATUTES, AND REGULATIONS

A. FOR PROCUREMENT OFFICERS AND AGENCIES

1. **Environmentally Preferable Purchasing** (COMAR [21.11.07.09](#))

“All procurement agencies shall purchase environmentally preferable products and services unless purchasing environmentally preferable products and services would limit or supersede any requirements under any provision of law or result in the purchase of products and services that:

 - (1) Do not perform adequately for the intended use;
 - (2) Exclude adequate competition; or
 - (3) Are not available at a reasonable price in a reasonable period of time.”
2. **Mercury and Products that Contain Mercury** (COMAR [21.11.07.07](#))

“All procurement agencies shall give a preference under this regulation to procuring products and equipment that are mercury-free. If mercury-free products and equipment that meet the agency's product performance requirements are not commercially available, the procurement agency shall give preference under this regulation to products containing the least amount of mercury necessary to meet performance requirements.”
3. **Efficient Product Purchase Goal** (Executive Order [01.01.2001.02](#))

“The state shall purchase Energy Star products when purchasing energy-using products, including computers, printers, copiers, and other office equipment, or shall purchase products in the top 25% in energy efficiency for products where labels are not available.”
4. **Responsible Recycling of Electronic Products** (State Finance and Procurement Article [§14-415\(b\)](#))

“When awarding a procurement contract for services to recycle electronic products, a State unit shall award the contract to a recycler of electronic products that:

 - (1) Is R2 or e-Stewards certified; or
 - (2) Meets nationally recognized and consensus-based guidelines, standards, and systems for recycling that are approved by the Department of the Environment in consultation with the Department of General Services.”
5. **Bird Safe Building** (State Finance and Procurement Article [§4-410.1](#))

“(c) (1) ...the Department shall establish standards for State buildings to conserve energy and minimize adverse impacts on birds that are consistent with the U.S. Green Building Council's Innovation Credit for reducing bird collisions and the American Bird Conservancy bird-friendly design recommendations.”
6. **Maryland High Performance Buildings Act** (State Finance and Procurement Article [§3-602.1](#))

High performance buildings shall meet the criteria and standards established under the "High Performance Green Building Program" adopted by the Maryland Green Building Council. To the extent practicable, the State shall employ green building technologies when constructing or renovating a State building that is not required to be a high-performance building.
7. **Outdoor Lighting Guidance** (Public Safety Article [§12-1301](#))

“(a) On or before October 1, 2026, the Maryland Green Building Council shall update or develop guidance for the purchase of outdoor lighting fixtures in consideration of recommendations regarding light pollution and color temperature published by the American Medical Association.”

B. FOR CONTRACTORS, BIDDERS, AND OFFERORS

1. **Verifying Environmental Claims** (State Finance and Procurement Article [§14-410](#))

“A bidder or offeror for a procurement contract shall certify in writing that any claims of environmental attributes made relating to a product or service are consistent with the Federal Trade Commission’s Guidelines for the Use of Environmental Marketing Terms.”

2. **Limitations and Prohibitions on Heavy Metals in Packaging** (Environment Article [§9-1902\(a\)-\(d\)](#))

“(a) Except as provided in §§ 9-1903 and 9-1904 of this subtitle, on or after July 1, 1993, a manufacturer or distributor may not sell or offer for sale or for promotional purposes any package or packaging component or any product in a package or packaging component to which any of the following was intentionally added during manufacture or distribution:

- 1) Lead;
- 2) Cadmium;
- 3) Mercury; or
- 4) Hexavalent chromium...”

3. **Limitations on Hazardous Substances** (Environment Article, [§§ 6-1202 - 6-1202.1](#))

A person may not manufacture, process, sell, or distribute in the State a new product or flame-retardant part of a new product that contains more than one-tenth of 1% of pentaBDE (pentabrominated diphenyl ether) or octaBDE (octabrominated diphenyl) by mass.

A person may not manufacture, lease, sell or distribute for sale or lease in the State electrical or electronic equipment that contain more than one-tenth of 1% of decaBDE (decabrominated diphenyl ether) by mass.

4. **Energy Efficient Outdoor Lighting Fixtures** ([COMAR 21.11.07.11\(A\)](#))

"If State funds are used to install or replace a permanent outdoor luminaire for lighting on the grounds of any building or facility owned or leased by the State or a unit of the State, procurement specifications shall require that:

1. Design of the luminaire maximizes energy conservation and minimizes light pollution, glare, and light trespass;
2. Except for a luminaire installed or replaced by the Department of Transportation, the luminaire has a correlated light temperature that is less than or equal to 3,000 Kelvins;
3. Illumination produced by the luminaire is the minimum illumination necessary for the intended purpose of the lighting; and
4. For a luminaire with an output of more than 1,800 lumens, the luminaire is a restricted uplight luminaire."

5. **Mercury-Added Fluorescent Lamps: Labeling and Disposal** ([Environment Article: §§6-905 and 6-905.4](#))

These statutes define the terms “mercury-added product” and “mercury-added fluorescent lamp” and list guidelines and restrictions for their sale and disposal.

6. **Shipping/Transport Requirements and Recommendations** Idling Law (Transportation Article [§22-402\(c\)\(3\)](#))

“A motor vehicle engine may not be allowed to operate for more than 5 consecutive minutes when the vehicle is not in motion, except as follows:

- i. When a vehicle is forced to remain motionless because of traffic conditions or mechanical difficulties over which the operator has no control;
- ii. When it is necessary to operate heating and cooling or auxiliary equipment installed on the vehicle;

- iii. To bring the vehicle to the manufacturer's recommended operating temperature; or
- iv. When it is necessary to accomplish the intended use of the vehicle.”

END OF SECTION V.

Appendix.

A. DEFINITIONS

1. **Ballast** – A device used to start and operate fluorescent or high-intensity discharge (HID) lamps. The ballast provides the necessary starting voltage, while limiting and regulating the lamp current during operation.
2. **Fully Shielded** – A light fixture (or luminaire) that allows no direct light above a horizontal plane through the lighting fixture's lowest light-emitting part, in its mounted position.
3. **Lamp** – The component of a luminaire that produces the light.
4. **Lumen** – A unit of measurement of luminous flux.
5. **Luminaire** – Complete lighting unit, including the lamp or other component that produces light and the assembly that holds the lamp, including an assembly housing, a mounting bracket or pole socket, a lamp holder, a ballast, a reflector or mirror, and a refractor or lens.
6. **Restricted uplight luminaire** – A luminaire that, except for a 0.5% maximum incidental uplight from reflection off mounting hardware, allows no direct light emission above a horizontal plane through the luminaire's lowest light-emitting part; and emits no more than 10% of the total direct light emission at or above a vertical angle of 80 degrees.
7. **Retrofit** – A retrofit of existing equipment is any application that makes use of the existing luminaire housing aligned by DLC Primary Use Designation. Retrofit kits and lamps must be listed under DLC Primary Use Designation to qualify for a corresponding measure code.

B. UTILITY INCENTIVES – ELIGIBILITY REQUIREMENTS

Utility rebate programs incentivize lighting products that are on the ENERGY STAR certification list or DesignLights Consortium (DLC) Qualified Product List (QPL).

1. General LED Rebate Requirements

- a. All equipment must be new and meet all designated requirements. Used equipment and equipment not meeting program and/or technical requirements are not eligible for incentives. Existing equipment must be removed and must be recycled according to DGS Green Purchasing standards. Removed equipment cannot be reinstalled in the State of Maryland.
- b. A utility program pre-approval letter will be issued once the application has been pre-approved. Only at this time may any existing equipment being replaced be removed or altered and may the proposed equipment being applied for be purchased and/or installed.
- c. ENERGY STAR luminaires must be hard-wired. Screw/plug-in lamps and recessed trim kits that screw in are ineligible for rebates.
- d. Equipment for each rebate measure code must be selected within the specified "Category," "General Application," and "Primary Use" designations, as classified by the DesignLights Consortium (does not include ENERGY STAR measures).
- e. Wattage, efficacy and lumens values for the proposed equipment are based on "Reported Data" and must be entered exactly as indicated on the DesignLights Consortium Qualified Products List and ENERGY STAR Qualified Products List.
- f. If TLEDs are being installed and fewer lamps than what is currently installed are proposed for installation (i.e. installing a single lamp in a two-lamp fixture), the luminaires must be

permanently delamped and the TLEDs re-centered in luminaires through the use of UL Solutions or CSA Group-listed retrofit kits specifically made for this purpose.

- g. Private labeled equipment must be listed on the electronic lighting worksheet in the designated manufacturer and model columns as “Original (as listed on DLC)/Private Labeled” make and model numbers. Spec sheet submissions must include both the spec sheet for the original equipment and the spec sheet for the private labeled equipment with a signed letter attached by the original equipment manufacturer that validates the equipment is the same.
- h. To qualify for a new fixture incentive, the existing luminaire must be removed and the new luminaire must be independently mounted in a manner that aligns with DLC Primary Use Designation for the luminaire type. Any application that does not align with DLC Primary Use Designation does not qualify for a new fixture incentive.
- i. A retrofit of existing equipment is any application that makes use of the existing luminaire housing as aligned by DLC Primary Use Designation. Retrofit equipment must be listed under DLC Primary Use Designation to qualify for a corresponding rebate measure code.
- j. The program is intended for one-for-one replacement. If a lighting project exceeds the one-for-one cap, written authorization by the program is required prior to application submission.

2. Lighting Controls

Lighting controls (e.g., photocells for outdoor lighting, occupancy sensors, daylight sensors, etc.) can provide an average of 30% savings on top of a luminaire or lamp replacement or retrofit. Each utility has requirements for controls on certain fixtures (see below) with extra incentives for networked controls that set lighting schedules and respond to peak demand opportunities. To be eligible for incentives, lighting controls are required to be installed as follows:

- a. Occupancy/vacancy controls are required to be installed in the following areas: Classroom/lecture/training rooms • Janitorial closets • Restrooms • Conference/meeting/multipurpose rooms • Locker rooms • Storage Rooms • Copy/print rooms • Lounges • Warehouses • Employee lunch and break rooms • Private offices • Other spaces 300 sq. ft. or less that are enclosed by floor-to-ceiling height partitions
- b. Lighting controls are not required in the following areas: Electrical rooms • Areas designated as security or emergency areas that are required to be continuously lit • Interior exit stairways, interior exit ramps, and exit passageways • Emergency egress lighting that is normally off
- c. Space types which fall under the requirements of needing both a daylight and occupancy/vacancy control (for example, an enclosed office containing windows with luminaires totaling more than 150W within the daylight zone) require a dual daylight and occupancy/vacancy DOS control (LC 111-112) or a combination of separate daylight and occupancy/vacancy controls. For combinations of separate control types, only one control incentive will be paid.
- d. Spaces with existing control types are not eligible for control incentives. Please indicate when entering your equipment if there are existing controls within a space.

- e. Exterior luminaires require a functioning time clock or photocell to qualify for lighting rebates.
3. **Instant Discounts through Participating Distributors.** No application is required and there is no wait. The discount for qualified products and equipment will be applied at the point of purchase.

For further technical details, see:

BG&E: [Technical Sheet Lighting Fixtures and Controls](#)

Delmarva Power: [Lighting Fixtures and Technical Sheet](#)

PEPCO: [Lighting Fixtures and Controls Technical Sheet](#)

Potomac Edison: [Business Prescriptive Incentives and Requirements](#)

SMECO: [Lighting Technical Sheet](#)

For Instant Discounts details, see:

BG&E: [Instant Lighting Discounts](#)

Delmarva Power: [Instant Lighting Discounts](#)

PEPCO: [Instant Lighting Discounts](#)

Potomac Edison: [Instant Lighting Discounts](#)

SMECO: [Instant Lighting Discounts](#)

END OF APPENDIX.