



**Maryland
Green Registry
MEMBER**

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

Maryland Environmental Service



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Self-Supporting Maryland State Environmental Agency
Member since June 2016

Management and Leadership

Environmental Policy Statement

Maryland Environmental Service (MES) remains focused on finding innovative solutions to our region's most complex environmental challenges, and on preserving our region's natural resources for generations to come.

Annual Environmental Goals

In accordance with the Maryland Greenhouse Gas Reduction Act Plan (GGRA), MES aims to have a 60% reduction of greenhouse gas emissions by 2031 and net zero by 2045. Additionally, MES supports State partners in reducing their emissions to encourage the State to meet these goals.

Environmentally Preferable Products and Services

In addition to providing environmental services, MES produces the 100% organic Leafgro product, which is used extensively by the landscape industry and homeowners as a source of humus for soil improvement. Leafgro® is an outstanding example of recycling at its best, as it is produced through composting leaves and grass clippings that would have normally been disposed of in a landfill. Similarly, MES also produces Leafgro® GOLD, which is produced through composted food scraps. Through composting food and yard waste, Maryland Environmental Service converts organic waste into a valuable resource.

Environmentally Preferable Purchasing

In June of 2023, Maryland Environmental Service established a Green Purchasing Committee and has begun the process of gathering data on green purchases and suppliers. Additionally, MES is developing a Green Purchasing Policy to establish green product purchase requirements.

Environmental Restoration or Community Environmental Projects

The MES Environmental Dredging and Restoration division focuses much of its attention on restoring the Chesapeake Bay. One area of focus is the restoration of the eroded land on Poplar Island in Talbot County. MES is responsible for taking material dredged from the Chesapeake Bay to Poplar Island and assisting in restoring the island with the dredged material. Poplar Island provides a place for dredged material to be used in an environmentally friendly way while restoring a habitat in which wildlife can flourish.

Waste

Recycling

Maryland Environmental Service has policies that encourage the recycling of waste. At our headquarters, we recycle materials from six major categories: mixed paper, mixed glass, compostables, plastics, electronics, and metals. A survey was conducted for waste created at headquarters in 2019 and found that MES was able to recycle 66% of solid waste. Below is the breakdown of the percentage of waste from each category. In total, around 40,000 pounds of solid waste were recycled in 2019 from headquarters!

- *Mixed Paper* 48%
- *Mixed Glass* 16%
- *Compostables* 13%
- *Plastic* 9%
- *Electronics* 9%
- *Metals* 5%

MES also provides a single-day recycling program for employees' household electronic waste on a periodic basis.

Hazardous Waste/Toxic Use Reduction

To increase energy efficiency and reduce the use of lightbulbs containing mercury, MES HQ converted all fluorescent lamps (FLs) to LEDs. Switching to LED lightbulbs not only creates less waste (as LED lightbulbs last much longer than fluorescent lamps) but also reduces toxic waste!

Composting

MES works with the Montgomery County Yard Trim Composting Facility (MCYTCF) and the Prince George's County Organics Composting Facility (PGCOCF) to turn yard trim and food scraps into Leafgro® and Leafgro® GOLD, soil amendment products sold at retailers throughout Maryland. These facilities are owned by their respective counties and operated under MES' direction. Each operation helps divert yard trim and/or food scraps from the landfill. Each facility processes up to 70,000 tons of material each year. Additionally, all food waste collected at HQ is sent to the Prince George's County Organics Composting Facility so every HQ member can contribute to making Leafgro GOLD!

Energy

Renewable Energy

MES has an onsite solar capacity of 599 kW at its HQ building. This capacity is generated with a field of 260 kW photovoltaic panels behind the building, 34 kW of roofing laminate, and 296 kW of photovoltaic canopies in the parking lot.

Transportation

Electric Vehicles

In 2015, Maryland Environmental Service installed 2 electric vehicle chargers at headquarters. The electric vehicle chargers are used to power one MES-owned electric vehicle that was bought in 2022. Similarly, MES seeks to encourage employee usage of electric vehicles by making the EV chargers available for use by MES employees at no charge. As of 2023, MES is in the process of installing more chargers and looking to add more electric vehicles to the fleet.

Employee Commute

The Maryland Environmental Service monitors and promotes environmentally preferable employee commuting practices including the use of efficient vehicles, carpooling, and teleworking programs. MES also provides bike racks, changing area and showers for employees who may choose to commute via bicycle.

To monitor the success of these practices, MES provided all HQ employees with a survey to collect commuting data using SCAQMD procedures. A 43.75 % reduction in conventional employee commutes was calculated from the survey results.

Water

Water Conservation

Irrigation: The following strategies are in place at Maryland Environmental Service's Millersville Headquarters to accomplish 100% non-potable use for the site's irrigation needs:

- 1. Nonpotable water use: A 5,000-gallon underground cistern harvests rainwater from impervious roof areas on the building. The cistern is not connected to any potable, natural surface, or subsurface water sources.*
- 2. Irrigation: The site is irrigated through a drip irrigation system that is connected to the underground cistern. The drip irrigation strategy allows water to drip slowly to the roots of plants, further decreasing the need for landscape water use. The irrigation system is not connected to any potable, natural surface, or subsurface water sources.*
- 3. Plantings: The building's associated grounds are mainly landscaped using native plants and grasses that thrive with normal amounts of rainfall inherent to our geographical location.*

Water Efficient Upgrades and Fixture Replacement Policy: MES has installed water-efficient showerheads and low-flow aerators in all restroom faucets. As the need arises, MES will consider retrofit fixture replacements that meet "U.S. EPA Water Sense Standards". The decision for fixture replacement will be based on economic assessments that will be performed as part of any future indoor plumbing renovation. These assessments will account for potential water supply cost savings, disposal cost savings, and maintenance cost savings.

Stormwater Management and Site Design

The Maryland Environmental Service's Millersville Headquarters site was designed and constructed with stormwater management strategies to mitigate

stormwater volumes through infiltration, harvesting, and evapotranspiration. These strategies were designed to meet or exceed state and local requirements for 10 and 100-year storms. The following are in place as part of the approach that accomplishes mitigation of 67% of precipitation falling on-site area during a 2-year, 24-hour design storm:

- 1. Stormwater Harvesting: Stormwater is collected from the building's rooftop and conveyed to the underground cistern. This water is then used for landscape irrigation.*
- 2. Bioretention: The site was designed with six bioretention areas. The bioretention areas provide water quality treatment, storage, infiltration, and evapotranspiration.*
- 3. Vegetated Filter Strip: There is a vegetated strip in the parking lot designed to handle sheet flow from a portion of the parking lot.*
- 4. Infiltration Pond: The stormwater management pond provides water quality treatment, infiltration, and discharge stream channel protection provisions.*
- 5. Stormwater Quality Vault: A concrete vault is used to store stormwater to attenuate peak flows and allow more gradual discharge to the infiltration pond.*

The strategies combine for a storage volume exceeding 290,000 gallons. This design was intended to limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, and reducing or eliminating pollution from stormwater runoff. This approach has delivered results that far exceed conventional site and building approaches.

Green Building

LEED Gold

In February 2011, the United States Green Building Council (USGBC) designated the MES Headquarters Building as LEED Gold using the Existing Building Operations and Maintenance rating system. MES Headquarters was the first Maryland State Government building with operations and maintenance practices certified to LEED standards. The building was recertified as LEED Gold in 2013, showing our ongoing commitment to sustainable operations and maintenance at our Headquarters Building.

Green Globes

In 2019 MES Headquarters received a Green Globes certification from the Green Building Initiative for existing buildings. The Green Building Initiative

rates buildings on their practices surrounding energy, water, and environmental efficiency. Buildings that achieve 35% or more of the points possible in the Green Globes rating system are eligible for certification of one, two, three, or four Green Globes. After their evaluation, The Green Building Initiative awarded MES three Green Globes.

Energy Star Rated Building

Maryland Environmental Service (MES) Headquarters Building earned the U.S. Environmental Protection Agency's (EPA's) prestigious ENERGY STAR, the national symbol for protecting the environment through superior energy efficiency. On ENERGY STAR's scale of 1 -100, MES Headquarters Building scored 94.

MES earned its ENERGY STAR rating in part by taking the following actions:

- *A reflective white roof is maintained.*
- *Efficient T-8 linear fluorescent tubes and electronic ballasts, supplemented by skylights, provide primary lighting throughout the building.*
- *Ongoing commissioning and operation planning exercises ensure that mechanical systems operate at peak performance and efficiency.*
- *Purchase of Energy Star electronics is preferred for all office equipment.*
- *Building Automation Systems allow for continuous monitoring and online control of the HVAC system.*

Occupancy sensors prevent unnecessary use of office lighting.

- *Efficient plumbing fixtures decrease the energy required for water heating.*

Note: ENERGY STAR was introduced by EPA in 1992 as a voluntary, market-based partnership to reduce greenhouse gas emissions through energy efficiency. EPA's ENERGY STAR energy performance scale helps organizations assess how efficiently their buildings use energy relative to similar buildings nationwide.

Profile Updated July 2023



Help build a greener, more sustainable Maryland through voluntary practices that reduce environmental impacts and save money.

Learn more at green.maryland.gov

