

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.

# **Luminis Health Anne Arundel Medical Center**



LH Anne Arundel Medical Center (LHAAMC) LH Pathways and LH McNew 2001 Medical Parkway Annapolis, Maryland 21401 443-481-4777 <u>https://www.luminishealth.org/en</u> Non-profit, community hospital *Member since October 2011* 

#### **Management and Leadership**

## **Environmental Team**

In June of 2007, Luminis Health Anne Arundel Medical Center (LHAAMC) formally launched its green team, the Environmental Action Relates To Health (E.A.R.T.H.) Advisors. This VP sponsored, multi-disciplinary team meets quarterly to evaluate and identify environmental factors and conditions that affect human health and work towards understanding how our community is impacted. The team helps support solutions and provides mitigation of issues affecting our staff, patients, community, and families who have put their trust in us.

The E.A.R.T.H. Advisors are dedicated to 3 primary principles:

- 1. Protecting the health of our building occupants.
- 2. Protecting the health of our local environment.
- 3. Protecting the health of our global community.

## **Environmental Preferable Procurement**

In 2004, LHAAMC converted 85% of the cleaning chemicals to Green Seal<sup>™</sup> certified cleaners. In 2007, LHAAMC reduced the use of mercury containing instruments to near zero. We also have a restriction on paints and adhesives with high VOC (volatile organic compound) levels and we have successfully transitioned to microfiber mops house wide which clean more effectively and require fewer cleaning products. In 2012, LHAAMC converted to formaldehyde free infant bath wash and more DEHP free tubing. In 2017 a conversion from disposable pillows to reusable pillows continued the commitment to fewer single use items.

The LHAAMC Cafeteria purchases locally grown, organic and seasonal produce when possible. They are consistently increasing Vegan and plantforward options in the cafeteria promotes their strong commitment to a healthy environment.

#### **Environmental Restoration and Community Environmental Projects**

LHAAMC supports the participation of staff in the annual Alliance for the Chesapeake Bay Clean Stream project. LHAAMC also began operating an annual on-campus farmers market in 2010. In 2017, the market expanded to increase community outreach and became one of the first farmers markets in Anne Arundel County to accept SNAP and provide a matching dollar market money program to the community.

#### <u>Waste</u>

## Solid Waste Reduction and Reuse

Historically, LHAAMC collects and disposes 3,200,000 pounds of trash annually. In 2010 the hospital accepted a charter designated to reduce waste improve air quality by decreasing the volume of waste sent to the incinerator while saving financial resources that can be used for quality patient care initiatives. It continues to this date and is tracked and evaluated to include improvements to the following key programs:

- 1. Remanufacturing & Reprocessing program
- 2. Reusable sharps containers
- 3. Waste segregation and recycling (described under Recycling)

#### Remanufacturing & Reprocessing:

LHAAMC partnered with an FDA approved, 3<sup>rd</sup> party vendor to begin a remanufacturing and reprocessing program. Many items approved by the FDA for multiple use, but packaged by the manufacturer as "single use" are now collected. Over a third of our cost savings is in the collection and reprocessing of pulse oximeter probes! This program has reduced our waste and minimized our environmental impact, while saving significant financial resources.

#### **Reusable Sharps Containers:**

Historically, LHAAMC annually sent over 35,000 pounds of plastic to the incinerator from our single use sharps containers. LHAAMC participates in a reusable sharps program. These reusable containers can be reused over 500 times, greatly reducing the amount of plastic being sent to the incinerator, and the air emissions, including dioxin, which are released when plastic is burned.

#### Surplus Supply Global Donation Program

Since 2014, LHAAMC partnered with Global Links to donate supplies that the hospital can no longer use. These supplies, while no longer useful for us, still had lots of life in them. Throughout the years we have donated over 12 tons of surplus medical supplies to hospitals in need Globally. The additional local benefit is seen in waste diversion, ordinarily these items end up in landfills or incinerators. We are especially proud of our efforts to support Global needs and reduce our impact on our local environment.

## Recycling

In June 2011, LHAAMC implemented a waste segregation and recycling program and set goals based on Practice Green Health standards. Source:practicegreenhealth.org

RMW >7% of total waste stream MSW >57% of total waste stream Recycling <36% of total waste stream.

Tracking and trending of the LHAAMC waste stream provides information to accurately evaluate carbon emissions impact on the environment, overlay equity evaluations to support internal policies, practices, education aimed at steps towards reduction and less harm.

- Prior to 2011 Regulated Medical Waste (RMW) was as much as 50% of our total waste stream and after implementing programs and education to drive change the percentage has consistently decreased.
- FY2022 trends show LHAAMC on track to meet industry goals Percentages are part of total waste stream tracking.

7.8% RMW, 60% MSW and 29.7% recycling

#### Hazardous Waste/Toxic Use Reduction

LHAAMC has a long history of recycling toxins, providing annual comprehensive chemical evaluations throughout all departments to work towards elimination when possible and correct storage, handling, and disposal to reduce hazardous health exposures.

2018 - Toxic Matters – Simple Steps to a Healthier Home brochure was created in conjunction with the University of California San Francisco educational outreach to develop local impact information to be provided through the Women's and Children departments at LHAAMC to support a decrease in chemical exposures and improved health outcomes.

2020 – LH Implemented a Pharmaceutical Waste collection program to support a "Zero Drain" philosophy ensuring that no pharmaceutical waste can reach our local watershed.

2021 – aerosol collection program implemented to increase waste segregation and safe disposal for increased community health and reduction of hazardous materials.

#### Energy

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## Energy Efficiency

LHAAMC has a long history of dedication to energy conservation. In 2001, LHAAMC installed exterior windows with a high glass glaze and high efficiency fluorescent light fixtures. These programs alone are estimated to reduce energy use by 14%.

When built, the Hospital South Tower achieved an 18-20% reduction in energy consumption when compared to standard basic designs. The HVAC system includes high efficiency chillers and chiller plant controls. A highefficiency dehumidification system (Cool Dry Quiet) was installed in the eight new operating rooms to ensure stringent conditions are met while minimizing energy use. The concrete used for the multi-level parking garage has a solar reflectance index (SRI) rating of 44, greater than the SRI 29 rating required by LEED and the roof surface is composed of a 16,700 square foot vegetative roof, as well as a heat-reflective, energy efficient roofing thermoplastic polyolefin (TPO) roofing system with an SRI of 78.

In 2014/2015, We were awarded 5 grants for the garage lighting project. One for each garage. The lights in all four garages on the AAMC campus were converted to LED, which resulted in a reduction electrical usage by 62.3% or 1.97M kwh/year. This translates to a savings of over \$200k in current dollars.

## Renewable Energy

LHAAMC secured a \$2.3M grant from BG&E and MEA for CHP. The project will move forward in the Fall of 2022. The project is intended to be completed within 2 years

LH McNew, purchased green energy credits for 2 years, equivalent to 20% of the total electrical loads at the facility.

#### **Water**

### **Water Conservation**

The new Hospital South tower was designed and built to achieve 33% increased water conservation than the baseline-calculated building. This will be achieved by incorporating low flow plumbing fixtures into all showers, toilets, faucets, and sinks ensuring water efficiency.

# Stormwater Management and Site Design

Step ponds have been designed to treat storm water runoff and remove pollutants before they reach the Cowhide Branch; a stream alongside LHAAMC's campus that eventually leads to the Chesapeake Bay.

LH AAMC's 16,700 square-foot green roof also offers hydrological benefits, including minimizing water runoff and filtering dust particles from the atmosphere before reentering the Chesapeake watershed. Eight nurseries provided over 24,000 plantings for the Anne Arundel campus and approximately 80% of the planting was grown within the local region.

To meet the parking needs of our growing campus, garages were constructed instead of flat, open parking lots, saving an additional 1.4 million square feet or 40 football fields of impervious surface.

#### **Transportation**

## **Employee Commute/Customer Travel**

In 2017, LH AAMC was named a Bronze <u>Bicycle Friendly Business</u> by the League of American Bicyclists. We were the first healthcare organization in Maryland and the first business in Anne Arundel County to receive the BFB designation.

<u>Wheels of Hope</u> – In 2018 LHAAMC, developed a program with community stakeholders to collect and refurbish bicycles to provide reliable climate-friendly transportation solutions. Bikes are donated throughout Anne Arundel County and provides direct support to LH Pathways clients.

## **Efficient Business Travel**

In 2022, a pilot survey was implemented to quantify staff reduction in emissions due to remote/telecommuting impact on the environment and cost savings. The goal of the survey is to embrace better Scope 3 data collection to increase accuracy of carbon emission reduction goal reporting.

## **Green Building**

## LEED Gold

LHAAMC South Hospital: In 2010, is the first Maryland hospital to be LEED Gold certified acute care pavilion. LHAAMC completed a major expansion in April 2011 including new emergency rooms, eight operating rooms and multiple levels of in-patient care units.

Sixth Floor of LHAAMC: In 2016, a build-out of the 6<sup>th</sup> floor at LHAAMC also received LEED Gold certification.

Luminis Health J. Kent McNew Family Medical Center: In 2021, Luminis continued the commitment to green building and applied for LEED Silver, but due to outstanding achievements was awarded the LEED Gold certification.

#### **LEED Silver**

In 2021, Luminis Health J. Kent McNew Family Medical Center, continues the commitment to green building and achieves LEED Silver certification. Additionally, the same year, the <u>USGBC of Maryland awarded</u> them the Community Leader Award in the Innovative Project, Health and Wellness in the Built Environment category.

## **Environmental Certification Programs, Awards, and Other Activities**

✓ In 2007, LHAAMC became the first tobacco-free hospital campus in Maryland. In 2014 LHAAMC became the first hospital to implement tobacco-free hiring.

In 2017, LH AAMC was named a Bronze Bicycle Friendly Business by the League of American Bicyclists.

Maryland Hospitals for a Healthy Environment (MD H2E) 2010 Trailblazer Award for LEED design and construction.

United States Green Building Council of Maryland (USGBCMD) 2010 Wintergreen Award for New Construction Maryland Hospitals for a Healthy Environment (MD H2E) 2011 Trailblazer Award for Greening the Surgical Services.

Maryland Hospitals for a Healthy Environment (MD H2E) 2012 Trailblazer Award; Nursing Leadership in Environmental Health

2014 Anne Arundel County Public Schools "Distinguished Stakeholder Award"

2015 Becker's Hospital Review Top 50 Greenest Hospitals in the US

Profile Updated July 2022





practices that reduce environmental impacts and save money. Learn more at green.maryland.gov