Welcome Note  (By Farouk Merhebi – EHSRM Director)

Dear Readers,

In the recent waste crisis, EHSRM participated actively in the task force led by AUB faculty members to find optimal solutions to managing our waste and those of the neighborhood. EHSRM Director was involved in the outreach and public awareness committee and the AUB community committee. This resulted in spreading the culture of recycling across campus by expanding the number of recycling bins to the lower campus and residential buildings and raising awareness on reducing, reusing and recycling and on the health effects of mismanagement of solid waste. Moreover, battery collection points were added in 12 buildings on campus (click here) to collect dead batteries for their safe disposal rather than disposing of them with municipal waste.

In our efforts to ensure the safety of labs, EHSRM developed a checklist system to classify labs as red, orange and green. Red rating indicates that the lab has critical safety violations and should make the necessary safety corrections within a week otherwise the lab will be closed. Green rating indicates that the lab is safe. Efforts are being coordinated with the Deans of each Faculty to enforce the application of safety regulations in labs. In addition, EHSRM prepared and launched a bid for the export and disposal of chemical waste generated from labs during the last two and a half years in accordance with Basel Convention for the Trans boundary Movement of Hazardous Waste.

EHSRM in coordination with FPDU installed fire alarm systems in Bliss Hall and Penrose Hall and installed evacuation plans and safe assembly areas signs in all buildings on campus to facilitate the evacuation process during emergencies.

Think Safe

1. How many times can glass be recycled?
   a) 10 times  b) Indefinitely

2. Biodegradable plastic bags should be:
   a) Used all the time because they break down in landfill
   b) Used only sometimes, as they still take up space in landfill
   c) Avoided where possible, because bags consume oxygen as they break down and this can lead to algal blooms

Answers are on page 2

Waste Management Facts

- Most plastic shopping bags are used only once and a plastic bag can take more than 200 years to decompose. Plastic bags that are thrown into the sea kill over a million sea creatures a year.
- Making glass from recycled materials cuts related air pollution by 20% and water pollution by 50%.
- The average Lebanese person generates around 1 kg of trash every day or about 365 kg per year.
- About one-third of an average dump is made up of packaging material.

Article of the Month

With the solid waste management crisis in Lebanon, light was shed on the integrity of proper waste management to protect public health and provide a cleaner environment. It is very crucial that several practices must come into action at the level of the country. Nevertheless, proper waste management must begin at home. Here are some tips that can be applied at home to reduce solid waste, recycle and reuse, and to a certain extent compost this waste.

Reduce: To start with, it is important to minimize waste generated at home to have less waste to manage later on. Waste generation can be reduced as follows:
   - Try to buy products with least possible amount of packaging. Food products like rice, beans, and spices can be bought in bulk from food sections in stores. Store such food products in glass jars that can be used again. This minimizes the waste generated from food packaging.
   - Consider using cloth bags instead of plastic bags. These bags that are recyclable and reusable are sold in many supermarkets in Lebanon.
   - Try to cook at home instead of ordering food from outside. Food cooked at home is not only healthier, but relatively generates less solid waste. Delivered food have a lot of packaging that ends up in the garbage increasing waste generated at home.
   - Try to minimize the consumption of plastic bottles. Whenever possible, try to reuse these bottles at home instead of buying new ones every time.
   - Minimize paper usage by reading newspapers and paying bills online.
   - Buy only what you need from the store and in the needed quantities.

Recycle and Reuse: Recycling and reusing are very important to conserve resources and save energy. Here are some tips:
   - Donate the stuff you no longer need. You can donate cloths, toys, computer parts, furniture, books, etc...
   - Purchase glass containers that can be used several times. If you already have plastic containers, they can be reused as well, but be careful to use them properly. Reuse boxes, bottles, and bags too.
   - Consider buying products that are eco-friendly and contain recyclable or recycled materials.
   - Segregate recyclables (paper, carton, glass, plastic, cans, etc.) from organic waste in different waste bags and send them to recycling industries. Around 35% of municipal waste can be recycled.

Composting: If your house happens to have a garden, you can consider composting your organic waste.
   - It’s best to site the compost heap on a level, well-drained spot, to ensure that any excess water drains away easily. This also helps worms to get in and get on with the job of breaking down the content.
   - Keep your compost aerated by turning the pile once a week and humid by spraying with water. It’s good to keep a mix of green (kitchen scraps, fresh leaves, coffee grounds) and brown material (dried leaves, shredded paper, untreated sawdust).
   - When your compost is ready you’ll have a dark brown, almost black soil-like layer that you can use as soil conditioner.
Abed Al Munim Huneino

Mr. Huneino joined AUB in 1993 as an assistant chef at the AUB Cafeteria. In 1996, he moved to the Athletics Department, and he is now a Senior Sport Facility attendant in CHSC. Abed is very active in recycling activities at AUB. He scored the best recycler since the start of the recycling program in January 2014; he has collected 65,718 bottles and cans so far. Abed went with recycling far from environmental interest to humanitarian ones, whereby he was amongst the first to suggest initiating the recycling for charity to support the Children Cancer Center of Lebanon.

Faysal Mehtar

Mr. Mehtar joined the Athletics Department at AUB in 2003. Then he was appointed as Sport Facility Assistant Attendant in the Charles Hostler Student Center. In 2012, he was promoted to Senior Sports Facility Attendant. Faisal started collecting plastic and metal bottles with the installation of Reva recycling machine in CHSC in April 2014; he is by now one of the two best recyclers at AUB with a total of 17,794 collected bottles and cans. Faysal recycles for good causes: not only a clean environment, but also a donation for the Children Cancer Center of Lebanon.

Answers to “Think Safe”

1. b. Glass can be recycled forever. The same glass can be recycled indefinitely over to produce high quality bottles and jars, but only if the right type of glass is used.
2. c. Biodegradable bags may seem like a good idea, but they too are not without environmental cost. The breakdown of starch-based plastic in water consumes oxygen, resulting in oxygen depletion that contributes to algae blooms and the death of marine life. It takes at least 18 months for most biodegradable bags to breakdown.

In the spotlight

Best Recyclers at AUB

The Environmental and Chemical Safety Unit conducted lab inspections in IOEC; conducted chemical handling training during nursing orientation; monitored the removal of asbestos containing vinyl tiles in DTS; conducted construction safety inspections in DTS, Main Gate, Assembly Hall, College Hall, Bechtel and Hariri buildings and beach safety inspections; conducted an assessment for waste segregation in PLM; monitored exposure to formalin in pathology lab; and is assessing the water footprint of AUB.

The Health Physics Services Unit reviewed 2 research proposals involving the use of radiation on human subjects; followed-up on CT relocation project and shielding requirements; notified personnel monitored for radiation exposure about their annual radiation dose for 2014; initiated the internal licensing for a number of PIs; prepared a new version for the nuclear medicine patients policy; provided training for EMU staff; reviewed the radiation safety training requirements for medical staff; prepared for the LAEC inspection and assisted them during their visit to the laboratories.

The Life and Fire Safety Unit reviewed material submittals and conducted site inspections and meetings related to DTS, IOEC and Bechtel projects; reviewed several renovation projects at AUB and AUBMC; tested the fire detection and alarm devices in the IT 2nd floor, Herbarium, FHS 1st floor - east wing, and Bliss building 2nd and 3rd floors; took part in meetings and reviewed material submittals and shop drawings of fire fighting, fire alarm, HVAC, and Dry wall systems, elevators, and ADA related equipment and features for the ACC project; met with KMC staff to discuss safety issues and agreed to work on the fire plan document for the Center; conducted fire safety sessions for summer camp kids; and took part in extinguishing 2 fires.

The Sanitation and Biosafety Unit assisted different AUBMC departments with safety requirements; reviewed key elements in the new JCI standards to ensure compliance; performed an inventory of the portable fire extinguishers in four buildings to be included in the AUBMC extinguishers maintenance plan; and conducted the semi-annual life and fire safety round at AUBMC.

The Risk Management Unit followed-up on many inquiries related to injuries and incidents; offered training on safe sharps disposal for ED residents; followed-up with IT Department regarding the online reporting e-form; prepared materials regarding incidents reporting for the PLM Moodle training.

The Occupational Safety Unit assisted different AUBMC departments with safety requirements; reviewed key elements in the new JCI standards to ensure compliance; performed an inventory of the portable fire extinguishers in four buildings to be included in the AUBMC extinguishers maintenance plan; and conducted the semi-annual life and fire safety round at AUBMC.

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The Sanitation and Biosafety Unit commissioned & recertified BSCs at DTS; reviewed a bid of a new BSC for Molecular & Cellular Biology – DTS; followed-up on a request for BSC testing in Iraq; conducted N95 fit testing for PLM staff; conducted biological spill drills and waste segregation rounds at PLM; arranged for the collection and testing of beach water samples; followed-up on CHSC pool water quality; responded to inquiries regarding HAZMAT training; followed-up on the MoA request regarding pesticide application on Campus; followed-up with Food Services Department on food safety requirements at ADA Dodge cafeteria; and provided assistance in the AUB recycling project.