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# SUSTAINABLE LABS WORKING GROUP (SLWG)

Notes from meeting July 9, 2015 2:00-3:30 pm, 3610 McTavish, Room 430

**Present:** Christian Bouchard, Graham Currie, Jerome Conraud, Maureen Donato, Patrick Julien, Stephanie Leclerc, Teodor Mocanu, Kathleen Ng, Wayne Wood (Chair)

**Guest:** Ali Akbari

## ITEM 1. REVIEW AGENDA AND NOTES FROM PAST MEETING

No changes were proposed.

## ITEM 2. BUSINESS ARISING

**Update re. autoclave project.** Re. biomedical waste (BMW):

- 80% of non-anatomical waste could be autoclaved and sent to Brampton, ON for processing.
- 20% of BMW was anatomical and sent to Baltimore (Maryland) for incineration.

There may be an interim supplier for biomedical waste collection:

- [Daniels International](#) apparently began collection BMW in November 2014. Christian and Nancy had met with them and their proposal looked interesting; Christian and Joseph (Joe) Vincelli from Environmental Health and Safety (EHS) would conduct an audit of their warehouse in Chambly.
- Incineral in Berthierville could be an alternative for anatomical waste (potentially further reducing emissions impact, instead of shipping to Baltimore).

## CALENDAR OF MEETINGS 2015-2016

Invitations had been sent to the fall meetings of the SLWG: these would take place every 6 weeks from 2:00-4:30 pm, most likely in 3610 McTavish, Suite 430 unless otherwise indicated.

- September 3, 2015
- October 15, 2015
- November 26, 2015
- January 7, 2016
- February 18, 2016
- March 31, 2016
- May 12, 2016
- June 23, 2016

## ITEM 3. NEW BUSINESS

A presentation would be made to Robert Couvrette (AVP University Services) about the [MyLab](#) system the following week: the system would facilitate gate-to-gate management (acquisition to disposal) of hazardous materials (radiative and chemical).

SLWG WEBSITE

## VISION FOR SUSTAINABLE LABS AT MCGILL

Engage the University community; promote and recognize efforts to reduce material, water, and energy consumption while maximizing cost savings; improve safety and accessibility through optimizing operations, training and awareness.

Approved by the SLWG 30 January 2015

EHS was currently restructuring its website. The Committees section would host a page with information about the SLWG and meeting documents.

**ACTION:**

- KATHLEEN to touch base with JOSEPH VINCELLI in EHS with content.

## ULSC SEPTEMBER

François Miller would be presenting a presentation about the Vision2020 Sustainability Strategy and the work of the SLWG at the next University Laboratory Safety Committee (ULSC) meeting in September. This would provide an opportunity to make visible the work of the SLWG to the University's structure of safety committees and potentially institutionalized within its reporting structure (ex. SLWG annual reporting to ULSC). [The ULSC advises and reports to the Vice-Principal (Research).]

## ITEM 4. GUEST PRESENTATION

### LABORATORY SUSTAINABILITY INITIATIVES: RECYCLING GLASS AND PLASTIC WASTES FROM RESEARCH AND TEACHING LABORATORIES

The Laboratory Sustainability Initiative was an SPF-funded project led by Ali Akbari and colleagues that explored the potential of diverting lab-generated non-hazardous glass and plastic material from landfill.

- The 16 monitored labs (Chemistry, Dentistry, etc.) generated an average of approximately 118 lbs of plastic and 305 lbs of glass weekly.
- Roughly extrapolating\* to the approximately 800 wet labs across campus, this could infer that 130 and 360 tonnes of plastic and glass respectively could be diverted

[Refer to PowerPoint presentation and [final report](#) circulated prior to the meeting for additional details]

General discussion notes:

- Whether chemical containers would break down easily due to their intended purpose (ex. glass being inert - no methane generated from glass breakdown due to being an inorganic material)
- Education being key to any successful implementation, from lab users/occupants to cleaners to recyclers, due to potential contamination issues that could torpedo any such lab-waste recycling programme.  
Examples:
  - Degree of tolerance for contamination
  - Ability to "guarantee" to material handlers that material was indeed non-hazardous. A report in Chemistry for Building Services showed that smells were problematic even after triple-rinsing containers.
  - Grad/PhD students best placed as educators due to their deep involvement in labs with the associated protocols
- Low prices disincentive for glass/plastic recycling
- Lack of available space in labs for increased sorting and collection of various types of specialized waste
- Potential suppliers who may be interested in receiving non-hazardous glass and plastic lab waste include
  - Enviroplast (would pay a few cents/kg)
  - TerraCycle (recycles boxes for pipet tips, but not the tips themselves)
  - NewAlta (plastic waste-to-energy conversion)

\*This estimate could be better normalized according to number of students, location/type of lab, or other patterns for further discussion. For example, according to Wayne biology labs generated more plastics than glass.

As next steps, the team had proposed conducting a life-cycle/impact assessment to determine which recommendation was best to mitigate (carbon) footprint. Ali also confirmed he would be joining the SLWG.

## ITEM 5. NEXT STEPS

### NON-HAZARDOUS LAB WASTE MANAGEMENT GUIDELINE WORKING GROUP

It was discussed whether a working group should be struck to develop non-hazardous lab waste management guidelines for the campus, given the varying degrees of experience and expertise around the table. However, it became apparent that it was unclear whether materials collected were even accepted by current recyclers.

- Fisher and Sigma were distributors, not manufacturers, therefore not well placed to provide assistance – it was felt that large scale lobbying would be required of manufacturers.
- Stéphanie mentioned that [Synergie Santé Environnement \(SSE\)](#) was a nonprofit organization established by doctors and associated with Recyc-Quebec to work with labs and hospitals to develop strategies for recycling and waste management.

#### ACTION:

- STEPHANIE to touch base with SSE to identify opportunities for collaboration.

## ITEM 6. OTHER BUSINESS

n/a