

# **WASTE MANAGEMENT GUIDELINES**

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Facilities Management

2017 - 2020





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## Overview

Dawson has accomplished much in the sustainability field within the college network of Quebec, however, one area in which our performance lags is our waste management. Our system, comprised of too many individual garbage bins, underperforms. Dawson sends approximately 75% of its waste to landfill (reference 2016). This can be translated into a diversion rate of 25%. By comparison, Montreal's diversion rate is 36% and l'École de Technologie Supérieure's is 68%. Our waste sorting analyses show us that at least half of our waste is compostable. Waste generation represents of Dawson's largest greenhouse gas emission sources, after natural gas for heating and cooling systems and transport.

Waste reduction goals by 2020:

- Implement a three-stream recycling system at all points of collection
- Introduce composting campus-wide
- Eliminate office waste pick-up
- Increase awareness of sustainable purchasing procedures (sustainable purchasing guidelines)
- Review "devis" for external contractors with regards to waste management
- Reduce landfill-bound waste by 40%

Reduction at the source needs to be the ultimate goal of any waste management system, and this will be a central tenet of the communication effort related to the unveiling of the new program. There are formidable challenges in hoping to reduce our total output. Challenges include our geographical position close to amenities that promote disposable products, a student-population difficult to reach with little history of positive waste management behaviour and college employees that have grown accustomed to disposables and easily accessible garbage bins. In the long term, we need to work on education and a paradigm shift towards the responsibility of the individual. Curricular integration of waste management goals also needs to be reviewed. Before this effort can begin, our infrastructure needs to be updated in order to encourage the behaviour that results in a reduction and proper sorting of waste.

This document describes the steps to implementing waste-related infrastructure in different areas of the school as well as a timeline with which this can be realized. Accomplishments have been inserted in this document as updates during the past three years.

## Context

Our world has been more aware of waste management since the 1980's; as an awareness of environmental ills grew, so did the impetus to maximize resource use. Recycling became important in this discourse as it was accessible and did not question modes of production.

Life-cycle analyses has had an impact on how society views the production of waste. A life-cycle analyses aims to tabulate all of the impacts a product may have on the environment from extraction to ultimate disposal (landfill or incineration). Life-cycle analysis is pertinent to Dawson as a purchaser of many products that end up in our waste stream. Dawson needs to further consider the impacts of purchasing procedures through a sustainability lens.

The recycling world was shaken in January of 2017 when the Chinese Government forbade the import of Western recycled material because contamination rates were high and thus the material demanded too much processing to be worthwhile.<sup>1</sup> The result of this is an international re-organization of markets and whereby a significant portion of recycled material in North America is currently being buried in landfill sites.

This change in China's laws has little impact directly on Dawson since our recycling service provider has local markets for nearly all of their products.

The Québec Government, in its *Politique de Gestion des Matières Résiduelles* sets bold objectives for Quebec:

*Responsabiliser l'ensemble des acteurs concernés par la gestion des matières résiduelles - objectifs d'ici la fin de 2015 :*

- Ramener à 700 kg par habitant la quantité de matières résiduelles éliminées, soit une réduction de 110 kg par habitant par rapport à 2008.
- Recycler 70 % du papier, du carton, du plastique, du verre et du métal résiduels.
- Recycler 60 % de la matière organique putrescible résiduelle.

As of 2017, these objectives were not met. For the moment, the objectives have been pushed to 2020. Many municipalities, including Montreal, have deployed important resources to establish collection-based composting programs

## Description of Dawson's Waste Management System

Landfill-bound waste is collected by RCI<sup>2</sup> from our waste compactor. RCI is an important corporation in waste management in Quebec. Dawson has an exclusivity contract with RCI until December of 2018. It buries our material at their landfill site near Lachute, Quebec. College garbage removal fees are \$30,000 per year. Some of these costs are fixed (delivery charges) while others are dependent on weight (tonnage to landfill). RCI collects about 200 Metric tons of material from Dawson that goes to landfill every year.

Most of the waste material is picked up by our cleaning personnel and brought to the compactor and recycling bins.

Recycling at Dawson (paper, cardboard, plastic, metal cans, glass) is collected by RAMI<sup>3</sup> (RécuperAction Maronniers Inc.). RAMI is a socio-professional insertion project. They employ people with developmental disabilities or in need of social insertion who are not apt to work in the regular job-market. RAMI sorts the material at their plant in Lasalle, and have Quebec buyers for almost all of their material. Many institutions around Montreal (Université de Montréal, Cégep Ahuntsic, Cégep de Rosemont,

<sup>1</sup> <https://www.theglobeandmail.com/news/national/chinese-ban-on-foreign-recyclables-leaving-some-canadian-cities-in-the-lurch/article37536117/>

<sup>2</sup> <http://www.rcienvironnement.com/profilCorp-entreprise.php>

<sup>3</sup> <http://cgea.ca/ent/recuperation-marronniers-inc/>



Cégep St-Laurent, Vanier College) use RAMI to collect their glass, metal, plastic as well as paper and cardboard. RAMI picks up approximately 50 metric tons of material from Dawson every year. Mixed paper represents at least 70% of the material (by weight) sent to recycling.

Dawson's cleaning personnel pick up most of the recycling throughout the College. Some recycling is also picked up through our association with an insertion project at the College for adults with developmental disabilities.

## Composting

There are three different composting sources at Dawson:

### 1. Campus Composting

Compost is collected in the College's hallways and common areas. The compost is picked up by student volunteers and coordinated by the Sustainability Office. In the warm months, with the help of student volunteers, Sustainable Dawson composts on site in five outdoor tumble composters. The mature product is used on site in our gardens.

### 2. Cafeteria Kitchen Composting

Compost is collected from the cafeteria kitchen and from 25 collection stations around the College. During the cold winter months, compost is collected by Compost Montreal<sup>4</sup>.

#### Update

In 2017, six metric tons of compost was collected. Compost Montreal charged for their service and in 2017-2018, this service cost Dawson approximately \$7,000 including bags. This is the most convenient way of handling the material while avoiding excessive washing of the collection equipment. In 2019, 1.1 tons of compost was collected per month throughout the College.

### 3. Landscape Composting

Contractors collect the leaves from our trees and the municipal composting service is free.

## Outdoor Garbage Bins

Outdoor recycling and composting is not yet available at the College. Our cleaning personnel empty our garbage cans daily. Squirrels, pigeons, gulls and raccoons cause a problem and empty and drag out garbage on the campus grounds. A student study estimated the costs of cleaning the campus grounds of loose waste between \$2,000-\$3,000 per year.

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<sup>4</sup> <https://www.compostmontreal.com/>

## Hazardous Waste

Hazardous waste is stored in special lab facilities according to WHMIS regulations with modified airflow. Certified hazardous waste pick-up companies dispose of these at least each semester.

Departments keep inventories of chemicals with every effort made to reuse material appropriate and safe for that purpose. The [Dawson Toxic Chemical or Gas Spill Protocol](#) is posted on the Facilities Management web site.

Fluorescent bulbs are collected and sent to a recycling facility. The College receives proof of recycling and the amount of linear feet of bulbs that is recycled yearly. Other types of bulbs are collected and sent to recycling facilities or landfill, depending on the type of bulb.

Dawson follows provincial regulated standards for chemicals that are used in cooling equipment. Our plan is to replace equipment that has non-compliant chemicals in the coming years.

The college uses ecological friendly paint (eco-source paints), or the equivalent to low VOC products.

### SAFETY PROTOCOL

#### Department & Laboratory Responsibilities

Every department or laboratory in the College; where any kind of chemicals or hazardous materials are used, or where operated machinery, which can produce any toxic emission; should have the following in a readily accessible location.

1. An updated list of the chemicals or hazardous materials used in the area.
2. A computer printout from WHMIS (available in Facilities Management) on all of the chemicals or hazardous materials used in the area, indicating action and treatment in the event of a spill or harmful exposure to the chemical.
3. Any equipment or first aid supplies necessary for dealing with a spill or harmful exposure and for proper clean-up of the affected area. First aid supplies are available through Security.
4. Any equipment and supplies necessary for handling and disposing of the chemicals or hazardous materials.

Stationery chemical detection devices are located in all chemistry labs or equivalent-use spaces.

## Electronic Waste

GEEP Inc. picks up non-functioning and repairable electronic waste. They refurbish computers and recycle materials responsibly. A small “finders fee” is given for any College device, or one that is donated by staff, that can be upgraded and sold by the company. Outdated but operational computers are sometimes donated to charitable organizations.

## Office Furniture

Office furniture that is no longer being used, but that is still in good working order is stored at the College and reused. Broken items are recycled as scrap wood or metal.

## Construction Contractors: Diversion of concrete, wood, gyprock and metal

Companies under contract from the College must presently follow provincial guidelines for waste diversion and recycling. Dawson needs to review future contracts to gauge whether more detailed recycling procedures can be inserted as specifications to better comply with the existing Dawson sustainability policy and College strategic plan sustainability goals.

## Evolution of our Waste at Dawson College

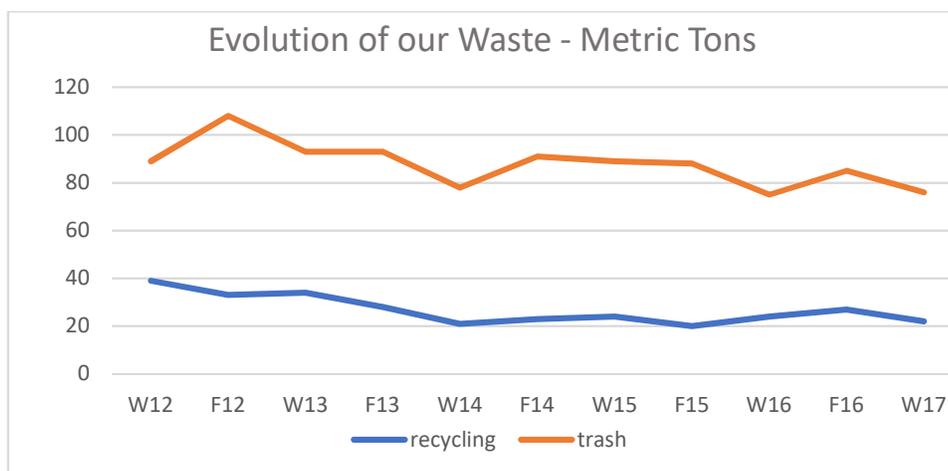


Figure 1

Figure 1 shows the evolution of our recycling and our landfill-bound waste. This chart does not include composting (started in 2016), large quantity metal recycling or construction and electronic waste. Landfill bound waste has dropped marginally, but is steady. The weight of recycling has significantly declined. Cardboard and glass/plastic/metal show consistent numbers but paper (70-90% of our recycling program) has been cut by half. This reflects both a trend in society where less paper is being used as people move more towards digital copies and at Dawson (where reduction campaigns have been successful).

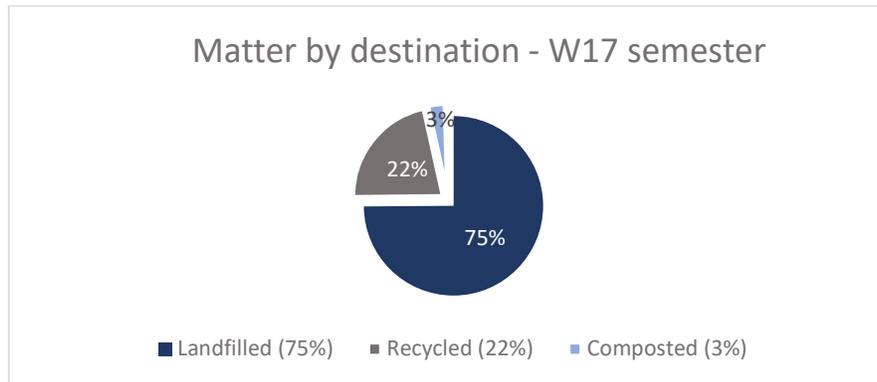


Figure 2

### Update

A waste audit was carried out in February 2018 which shows both that there is a problem in placing waste in the appropriate containers and that the potential to do better (given equal and effective infrastructure) is significant.

## What is In Our Waste

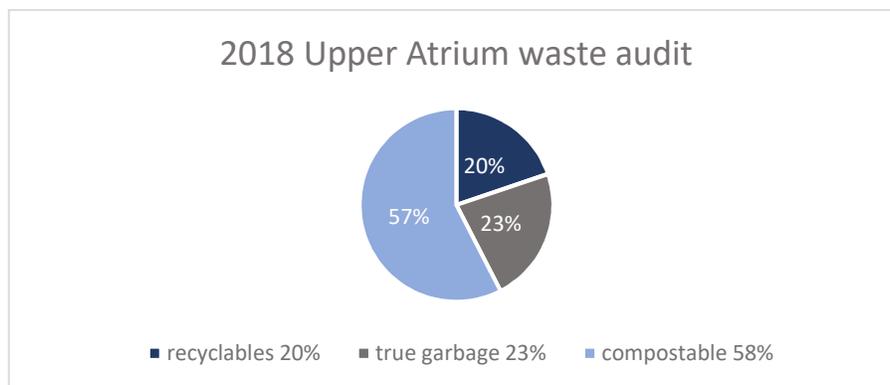


Figure 3

### Update

Dawson's poor sorting ratios are related to outdated infrastructure, but also to the nature of the waste material. This study is based on five garbage sorting experiences over the winter 2018 semester.

Evidence suggests that a large portion of our waste (by item) is related to disposable food packaging from take-out counters both at Dawson and in nearby downtown locations. Often these items fall within "in between" categories. These are items easily placed in any sorting container by users because of limited knowledge of waste management criteria.

For example, a soiled paper sandwich wrapper might be interpreted as needing to go into recycling since it is paper. Someone else might remember that soiled paper should not go to recycling, but rather to the landfill stream. A third person (who might be right), might know that paper composts and that therefore this is the right stream for the product.

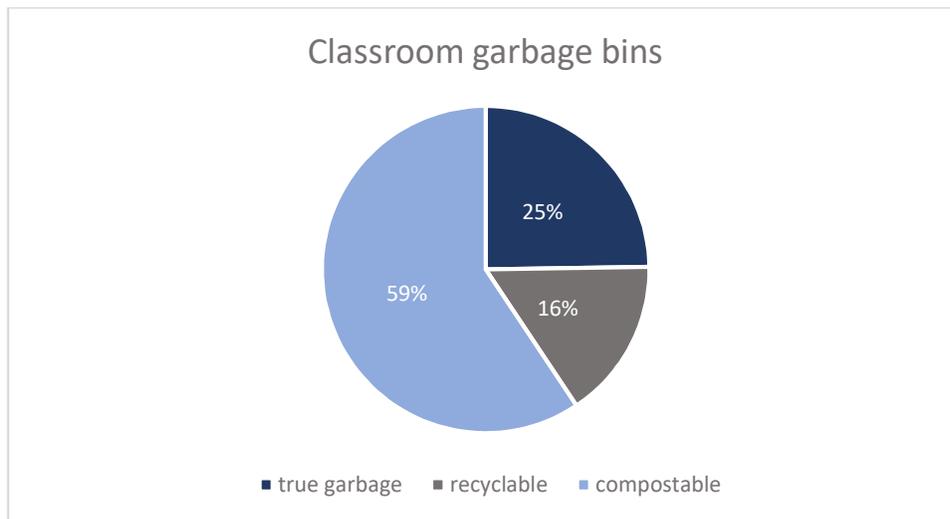


Figure 4

## Diversion Rate

The 2017 diversion rate is in the order of 25% and ought to expand rapidly with the deployment of the new system and the removal of the old infrastructure. The stated objective in the Sustainability Plan of reducing our landfill bound waste by 40% by 2020 would bring us to a diversion rate of 37% to 43%, depending on whether the material is reduced or better diverted.

## Carbon Budget

The impact of our waste on our carbon budget is not to be underestimated. In 2016-2017, our carbon represented 251 Metric tons of CO<sub>2</sub> equivalent, 42% of our total, excluding emissions related to travel. Dawson aims to be carbon neutral by 2017-2018 (scope 3) and the total emission tonnage can be significantly reduced with an efficient waste management system in place. High participation rates in the College's planned compost system could reduce this building emissions by at least half.

## Proposition

There are many stand-alone garbage cans. These are repositories for recycled and compostable material as users tend to go to the nearest receptacle for the material they wish to discard. These should be completely removed. Instead three choices should be offered to the user in all areas of the College: composting, recycling and landfill-bound waste. The main impetus for this, beyond wanting to simplify the system for the user, is to make sure all choices are offered throughout the College

Facilities Management would like to propose College-wide implementation of compost. The potential exists to collect more than 100 tons of material for composting. Waste from organic sources that is buried produces methane, a powerful greenhouse gas. By composting this "waste," we can avoid these emissions. This would reduce our carbon footprint significantly.

The other major change that we can propose is to move all recycling to single-stream, co-mingled. Our recycler does not need material to be pre-sorted. This will also simplify the collection and the choice by the user as the system will resemble municipal systems in the region.

Facilities Management plans to collaborate with the cafeteria and eventually also work with the Alexis-Nihon Plaza food vendors to improve and perhaps find ways to reduce the disposable packaging sold with their food. It will also be necessary to keep working on education programs to impact the users so that they reduce their production of waste and sort correctly. Opportunities to collaborate with teachers will be reviewed (fieldwork students, projects, data collection, etc.)

The communications effort related to these changes, including standardizing signage, will be important. A few different models of bins should be chosen and these should have consistent colors as well as consistent signage.

A detailed description of how to approach each type of College location as well as how this fits into a time line, is in the appendix section of this document.

## Education and Communications

A communication plan has been developed that will make use of different methods: web page, mass e-mails, and a page in the student agenda. The communication campaign will also make use of a catchy slogan "*thanks for nothing*" and an emblematic mascot. These messages will serve to introduce the new infrastructure as well as show people how to sort properly. Meetings will be organized to describe the campaign and answer questions and to prepare people for the upcoming changes in waste pick-up methods.

Facilities Management department will also eventually hire a crew of students ready to help people sort properly in the cafeteria areas. This will begin with new infrastructure in eating areas and be necessary for a few days at the start of every semester. At this time, people tend to buy the same products and produce the same waste repeatedly. Helping people make the right sorting decisions early will more likely result in a repeated behaviour.

### **Update**

Signage plays an important role and we have tried to capture symbols that people will understand. The colour of the bins will be chosen in order to fit the hallway décor of Dawson. The aim is to have bins that are noticeable enough to be seen quickly but also fit in to the other colours well enough so that it is not the only thing that somebody might see in a hallway.

## Reduction

Reduction is the ultimate goal of this campaign and should remain central to all actions. By reducing the number of places where waste can be brought, we hope to modify user habits. Secondly, by eliminating office pick-up, we hope staff will become more conscious of their waste production.



Finally, Dawson should review purchasing practices to consider various eco-certified products and its life cycle. A supplier could be chosen over another according to their packaging methods or a product chosen according to the impacts it will have on our waste management methods, including potential costs of treating a particular material responsibly.

## Anticipated Challenges

### Collecting Compost

Introducing compost will present particular challenges: Many people do not understand how compost works, its importance or what is compostable versus what is not. The fact that municipal programs have been implemented in the Montreal region during last five years should greatly help at this level. We can presume that many people are already accustomed to off-site composting collection. Our present college composting also accepts exactly the same material as the City of Montreal.

Three threats scare users - cleanliness, insect infestations and odor. The fact that the material we will be disposing of in compost bins is exactly the same material placed in waste bins before might alleviate fears. The key to each is frequent pick-ups and keeping the equipment clean. Essentially, all compost needs to be picked up every day. This represents a sizeable challenge and we must be ready to anticipate an adjustment period.

Cleaning personnel will have to be closely followed in the beginning of the program to ensure conformity to our cleanliness standards. Furthermore, complaints will have to be addressed in the briefest of delays.

The cafeteria will allow their “garbage” refrigerator to be used for compost storage. This should help us greatly in avoiding odours and insects. Collected compost will then have to be brought to shipping at pre-arranged moments through the week for transport by truck to the composting facility.

Sustainable Dawson will keep operating our on-site composters. The cafeteria kitchen waste compost stream will exclusively feed the new pick-up system, as it is the least contaminated.

Unfortunately, neither the City of Westmont nor Montreal have begun to collect compost from institutions. They want to operationalize their composting sites as well as complete the plan to pick up from all residences before considering new sources of material. The City of Westmont has made it clear to us that they want to keep talking with us about this eventuality. A pilot program is occurring between

the Borough of Cote-des-Neiges and the University of Montreal to pick up some of the Université de Montréal's compost. Facilities will keep a close eye on the development of this program.

This means that a company will have to be hired to remove our material and compost it. This is happening with Compost Montreal. Although their price is high (by volume of container), they assure us that a much greater volume would benefit from an economy of scale and will not impact our overall costs very much. One notable advantage of this company is that their compost site is less than 5 kilometers away. Compost Montreal estimates that the cost of a tripling of volume will be about \$15,000 per year.

## No More Garbage Office Pick-up

A stoppage of waste material pick-up from offices will be resisted. Facilities Management needs to communicate gently but firmly how office occupants should take care of their own waste management. Staff have come to expect that their waste bin is emptied for them. Facilities Management will explain how time that was spent emptying waste bins can now be spent on cleaning. We also hope to communicate that if people wish to have less waste in their bins, they should carefully choose what they bring to their office.



There are certain benefits to emptying your own garbage can:

1. Exercise
2. Mental health break
3. Connecting with colleagues (water cooler conversations)

Some people will refuse to sort their refuse on the basis that they will dirty their hands. Facilities Management should encourage them to have different containers to sort their garbage and will give away small containers for this purpose.

Cégep de Rosemont, in Montreal, stopped collecting individual waste bins in the 1990s. They tell us that there was a period of complaining but that staff quickly got used to the new routine.

## Relaying Information

Facilities Management needs to systematize the way information is gathered and presented as it relates to waste management. In and of itself, this will create buy-in from employees involved with large volumes of waste (Purchasing, Shipping, Construction Projects, IT, etc...).

Waste audits should be performed periodically (either in-house or by external agencies) so as to produce data that is consistent and will allow us to better understand how the system is being used and evaluate the success of changes and new initiatives. In these audits is the potential for student projects that meet curriculum competencies.

## High Contamination Rates

The College's new internal waste station system should benefit from both higher exposure and better physical presence through better infrastructure and thus a higher portion and volume. However, it is possible that our compost and recycling streams suffer from high contamination rates. If this happens, the

problem will need to be explored to find a solution through education or communication. It might be related to a particular product or a particular location.

## Collecting Liquids



Liquids present a problem in our waste management system. Paper coffee cups are ubiquitous on campus and frequently Dawson community members do not know how to dispose of them. Many of these cups still contain liquid. These cups are found in both garbage bins and recycling containers, and liquid is not good in either. It makes transport more complicated and messy and can contaminate recycling (particularly paper) when that collection stream is chosen.

This should be pilot tested in the space like the Upper Atrium. Other spots might be chosen as well to pilot this approach including the Library, which presents a particular problem as it is carpeted.

Three stations should be tried – one by the Cafeteria serving area, another by the entrance of the Library and a third on the third floor landing where students often split off to go towards their classrooms. These will have to use

bright and clear graphics in order to explain their existence. Cleaning will be done frequently and the jars that collect the liquids emptied frequently as well to avoid insect infestations.



## Evaluation and Monitoring

The weights and volumes of our waste of different categories are kept in meticulous fashion in order to be able to ascertain our progress. These results do have seasonal variations (based on start and finish dates of semesters) and therefore it is important to look at the long-term trends.

Yearly waste sorting audits should be done on an ongoing basis in order to assess the contamination rates of different sectors and different types of receptacles. Ideally, when a new infrastructure is introduced, contamination rates can be tested to see how it might be altered if the rates are not acceptable. Our recycler, informally, considers that a 15% (by volume) contamination rate is acceptable, and our composter considers 10% (by volume) acceptable. If those barriers are crossed, Facilities Management will work to sort out the problem to keep a good standing with partners.

## Projections for Waste Management Tonnage

All Figures in Metric Tons	2017-18	2018-19	2019-20	2020-21	2021-22
Landfill	160	135	110	95	80
Compost	5	20	40	50	60
Recycling	50	55	60	60	60
Total	215	210	210	205	200

## Annex 1: Proposed Steps to Implementation

### Hallways

Hallway appearance should be uniform so users are drawn to the same infrastructure at the same logical places. This infrastructure should ideally use standardized containers and signage, to make it easier for the user as well as the collection agents. Bins which tip toward the cleaner are the most practical from the cleaning personnel's perspective.

<b>Steps</b>	Inventory present hallway infrastructure. Choose proper bins and purchase them; choose and produce signage.  Remove existing steel waste bins (what to do with them?) and remove steel mounting plaques on walls. Remove the old stations, replace paint if needed, install new station in same or new location, install signage.
<b>Timeline</b>	Waste bins in the classrooms will be removed in the summer of 2018. Hallway bins will be installed in the fall of 2018, steel <b>bins</b> and old recycling bins will be removed as the new hallway bins are installed.

### Offices

In office groupings, a central location should be chosen with a garbage bin, recycle bin and small compost bin. Models which are similar to those in the hallway will be chosen if budgets permit. Ideally, the look, signage and colours will be harmonized so as to encourage consistent sorting. All other stand-alone garbage cans, have to be removed. Mini-bins for offices could be given out as a promotional or practical item.

In individual offices, occupiers will have to go towards the nearest hallway to empty their bins themselves. Facilities Management should assess sorting rates from this method and sector to take corrective action if necessary.

For the moment, the cleaning personnel have begun to pick up waste in offices only once a week. In the fall, or perhaps in the winter semester, Facilities Management will look towards individual departments to volunteer themselves to stop regular waste pick up from offices. Eventually (perhaps in 2019?) cleaning personnel will stop picking up waste in offices.



<b>Steps</b>	Inventory present office infrastructure. Suggest a plan for each group of offices. Choose proper bins and purchase them or plan the move and removal of infrastructure. In larger office groupings, it might be appropriate to consult the occupants in order to get their proposed location ideas and create buy-in.
	Any printer needs to have a recycle bin immediately beside it for misprinted paper. If the office has central printers, these should be equipped with a recycle bin immediately adjacent to it.
<b>Timeline</b>	Changes to office waste procedures will be announced in the summer of 2018, further procedures will be announced through the fall of 2018.

## Classrooms

Classroom garbage cans should be removed and the teachers' help requested in order to help the students take responsibility for their garbage.

<b>Steps</b>	<p>Implement a pilot project along one particular hallway segment with different parameters. Test the cleanliness of the spaces before and after the change to establish the impact. If the pilot has acceptable results, inventory classrooms. Remove garbage cans and other waste infrastructure which might be present.</p> <p><b>Note:</b> the pilot was carried out and concluded that there was a small difference of objects left in classrooms without garbage cans as compared to those with garbage cans. The difference is not large enough to be significant and thus the decision to remove garbage cans from classrooms has been taken and the work is well underway to remove these and repair and paint the surface underneath.</p> <p>Remove the steel bins (what to do with them?) and remove steel plaques which hold them. Paint under the bins.</p> <p>Any printer needs to have a recycle bin immediately beside it. Ideally, this is a bin with a slit at the top in order to identify it as a "paper" bin.</p>
<b>Timeline</b>	Classroom garbage bins will be removed in the summer of 2018. Classrooms with printers will be equipped with recycle bins at the same time.

## Laboratories, Lounges & Studios

In these spaces, a central location or locations should be chosen to host a garbage can, recycle bin and small compost bin. Models which are similar to those in the hallway will be chosen if budgets permit. Otherwise, Dawson will use equipment that it already has. All other stand-alone garbage cans will be removed.

# Waste Management Report and Guidelines

Dawson College



The spaces sometimes present the additional challenge that equipment will be moved by occupants. Cleaning personnel will have to be mandated to place equipment back to its original position. Infrastructure that is easily displaceable should be chosen to use this quality to our advantage.

Some laboratories use substances, which require special disposal protocol (biology, chemistry, photography, etc...). These will have to be dealt with on a case-by-case basis. Presumably, much of this is already handled correctly, it is important to ensure that new waste management infrastructure does not interfere with this functioning.

Any printer needs to have a recycling bin immediately with it.

<b>Steps</b>	Inventory present laboratory, lounge and studio infrastructure. This will be an opportunity to meet the occupants (in particular lab technicians) to get their suggestions about implementing the change. Suggest a plan for each space independently. Choose proper bins and purchase them or plan the move and removal of infrastructure. Any printer needs to have a recycle bin immediately beside it.
<b>Timeline</b>	Labs will start to be explored in the fall of 2018 to come up with solutions for each one in particular. Tests for new equipment will be run in the winter of 2019.

## Library

The Library presents an interesting challenge in that eating and drinking there are forbidden yet happen on a regular basis (and is tolerated to a certain extent). Many garbage cans will have to be removed. Some central sorting locations should be installed. Librarians will have to be consulted to find the best way of dealing with the eating question.

<b>Steps</b>	Inventory present infrastructure. This will be an opportunity to meet librarians to get their suggestions about implementing the change. Suggest a plan for each room. Choose proper bins and purchase them or plan the move and removal of infrastructure. Any printer needs to have a recycle bin immediately beside it.
<b>Timeline</b>	The Library 6 <sup>th</sup> floor should be covered with the initial installation of new bins in the fall of 2018. A new multi-bin will have to be purchased and installed in the winter of 2019, or the summer.



## Large Open Spaces

large open spaces need to be treated individually as each presents separate functions, volumes and shapes and therefore has differing needs for infrastructure.

Transitory spaces (Lower Atrium, landings of escalators (H-3, F-310), large hallways) are much like hallways and should be treated the same way. This being said, the Lower Atrium and hallway to the subway represent particularly large volume of passage where people are in transition and thus might be holding an item they want to discard of (newspaper, paper coffee cup, food or packaging).



Hallway appearance should be uniform. This infrastructure should ideally use standardized containers and signage, to make it easier for the user as well as the collection agents. Several models of bins are being considered. Bins which tip towards the cleaner are the most practical from the cleaning personnel's perspective.

The entrances, in many CEGEPs, tend to have a flashy new infrastructure, in order to display the stand of the College. We propose to remove all infrastructure from the De Maisonneuve and Sherbrooke entrances, so that Dawson displays, in a sense, a new garbage-free attitude. Because it is a big point of production, we should conserve outdoor waste bins at the De Maisonneuve entrance.

<b>Steps</b>	Inventory present infrastructure. Choose proper bins (some like regular hallway infrastructure, others like eating areas infrastructure, and even perhaps some like metro infrastructure) and purchase them. Study volumes in Lower Atrium and hallway to metro to choose proper site for new bins.  Remove the steel bins and other garbage cans. Remove steel plaques, which hold them. Paint under the bins. Remove the old stations, paint under where they are, install new station in same place, install signage.
<b>Timeline</b>	Fall 2019

## Eating Areas (Upper Atrium, Oliver's, 3C Cafeteria, Conrod's)

Cleanliness is a challenge in these areas as users abandon their waste on tables. This issue needs to be continually addressed, especially at the beginning of the school year in order to try to instill better habits. Different campaigns could be attempted. Cleaning personnel can play a role. It is important that students do not feel cleaning personnel are hired to pick up after their bad habits.

Most bins should be removed and large central sorting areas that are clearly labelled, easy to clean and user friendly, installed.

In these areas it would be ideal to have infrastructure which can move for events, as these spaces shift.

The Upper Atrium should have four or five waste stations. One of these, the one closest to the exit leading to D and E, should ideally have a liquid collection station.

# Waste Management Report and Guidelines

Dawson College

Facilities Management is considering getting a custom station built along the wall to the cafeteria serving area. This is a prime collection spot for waste and a large home-made sorting station will serve to put the importance of waste management at a central space.

Conrod's should have two stations, one in the middle and one near the doorways leading out. Oliver's should have two stations and the 3C Cafeteria should have four.

These stations should be able to roll on casters and be moveable according to changes in the configuration of seating or displays or as events require them.

<b>Steps</b>	Inventory present infrastructure. Choose proper large bin stations and purchase them. Study volumes in order to choose proper site for new bins. Remove the steel bins and other garbage cans. Remove the old stations, paint under where they are, and install new station in same place, and install signage.
<b>Timeline</b>	Solutions will have to be tried and tested in the winter of 2019. Designs for the big central unit also should be submitted discussed and chosen in the same period in order to be installed in the summer of 2019.

## Outdoors

The ground's appearance is very important. This infrastructure needs to be of good taste and highly resistant. It should ideally use standardized containers and signage to make it easier for the user as well as the collection agents. Furthermore, it will be important to consider a waste bin lid that prevents animals from entering.

<b>Steps</b>	Inventory present infrastructure. Research what has been done by other CEGEPS for outdoor infrastructure (do some collect recycling? Compost? Does it yield a good diversion rate?) Choose proper bins or stations and purchase them, choose and produce signage. Remove the current bins (what to do with them?). Install new bins or stations in same place, install signage.
<b>Timeline</b>	Solutions should be studied and proposed in the winter of 2019. Some units should be tested in the summer and fall of 2019. Units should be ordered and installed in the winter of 2020.

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