# 2015 WASTE AUDIT REPORT

# SHERIDAN COLLEGE DAVIS & TRAFALGAR CAMPUSES

# SOLID NON-HAZARDOUS WASTE AUDIT ONTARIO REGULATION 102/94

PREPARED BY

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## TABLE OF CONTENTS

TABLE OF CONTENTS	
1.0 INTRODUCTION	3
1.1 PURPOSE	3
1.2 METHODOLOGY	
1.3 DAVIS CAMPUS: OBSERVATIONS	7
1.4 DAVIS CAMPUS: WASTE DIVERSION	
1.5 DAVIS CAMPUS: MIXED RECYCLING COMPOSITION	
1.6 DAVIS CAMPUS: ORGANIC COMPOSITION	11
1.7 DAVIS CAMPUS: WASTE TO LANDFILL COMPOSITION	12
1.8 DAVIS CAMPUS: CONTAMINATION OF ZW BINS BY AREA	13
1.9 DAVIS CAMPUS: SUMMARY OF RECOMMENDATIONS	15
APPENDICES	17
GLOSSARY OF WASTE TERMS	17
SPECIFIC WASTE CATEGORIES & WASTE AUDIT DATA (DAVIS CAMPUS)	18
MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE AUDIT (DAVIS)	22
MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE REDUCTION WORK PLAN (DAVIS)	
MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE AUDIT (TRAFALGAR)	49
MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE REDUCTION WORK PLAN (TRAFALGAR)	66

#### 1.0 INTRODUCTION

#### 1.1 PURPOSE

The solid waste audits performed by Spinnaker Recycling Corp. ("Spinnaker") at the Davis Campus of Sheridan College was designed to:

CALCULATE CURRENT DIVERSION RATES FOR RECYCLED, ORGANIC AND REUSED MATERIALS TO DETERMINE THE EFFECTIVENESS OF DIVERSION PROGRAMS

IDENTIFY OPPORTUNITIES FOR IMPROVEMENT AND EXPANSION TO DIVERSION PROGRAMS

DEVELOP A WASTE REDUCTION WORKPLAN THAT IDENTIFIES POLICIES, PRACTICES, TARGETS AND GOALS FOR NEW AND DEVELOPING WASTE REDUCTION PROGRAMS

COMPLETE & DOCUMENT THE AUDIT AS PER ONTARIO REGULATION 102/94 UNDER THE ENVIRONMENTAL PROTECTION ACT

Though the body of this report references the findings of the audit at the Davis Campus, Ministry of Environment Reports of a Waste Audit and Waste Reduction Workplan for both Davis and Trafalgar are appended to this report. These waste audits have been conducted and documented to be compliant with Ontario Regulation 102/94. Beyond the reporting of waste diversion at Trafalgar and the inclusion of completed Ministry Environment waste audit reports in the appendix, the body of this report deals with the 2015 waste audit at the Davis Campus.

At the time of the 2015 audit, the Davis and Trafalgar campuses had implemented the following collection programs and/or events:

- Mixed Recycling (includes glass, metal, paper, plastic)
- Organics (rolled out in 2014)
- 3. Waste to Landfill
- Bulk Old Corrugated Cardboard (OCC) Recycling
- Wood Recycling (Trafalgar only)
- 6. E-Waste Campus Program & E-Waste Day Event (combined in this report)
- 7. Clothes Reuse Event (Trafalgar only)

Sheridan College recycling programs meet and exceed Ontario Regulation 102/94 requirements for designated facilities as the recycling programs include the capture of the following recyclable materials:

- Aluminum food or beverage cans
- Cardboard
- Fine Paper
- Glass Bottles, Jars & Food/Beverage
- Newsprint
- Steel Food & Beverage Cans
- Polyethylene Terephthatlate (PET)

#### 1.2 METHODOLOGY

The waste audit results presented in this report were obtained from observations and information collected during two on-site meetings and on-site waste audits conducted in April 15 & 16, 2015 at the Davis Campus.

Two data sets were employed to generate the annual waste generation rates of specific waste materials at the Davis Campus. First, the 2014 annual weight information for the individual collection streams were obtained from the service providers and the second data set was generated during the sorting and weighing of a 24 hour accumulation of material in ZW bins on April 15 & 16, 2015 on-site at the Davis Campus.

The 2014 single-material stream weights provided by the service provider were not audited and were assumed to be 100% single-stream without any contamination by other materials. Sheridan has implemented several of these single-material stream diversion programs including:

- Bulk Old Corrugated Cardboard (OCC) Recycling
- Wood Recycling (Trafalgar, not Davis)
- 3. E-Waste Campus Program & E-Waste Day Event (combined in this report)
- Clothes Reuse Event (Trafalgar, not Davis)

Only one adjustment was made to the 2014 weight information employed in this report. Because the ZW bin program, which for the first time introduced organics recovery, was rolled out in August 2014 at Davis, the 2014 weight information for organics and waste to landfill was adjusted by a factor or 12/5 bringing the estimate of the annual organics recovery weight from 25,130 kg/yr to 60,312 kg/yr. The additional organic weight of 35,182 kg/year (60,312 kg/yr – 25,130 kg/yr) was subtracted from the waste to landfill stream.

The second source of data was generated through the two day on-site audit of the ZW bin streams at Davis. All Sheridan College campuses have implemented a Zero Waste (ZW) program with a long term goal of eliminating all landfill waste by 2020. The ZW program includes three regular collection streams in ZW bins:

- Organics
- 2. Mixed Recycling (glass, metal, paper, plastic)
- Waste to Landfill

These material streams are "mixed" composition so they were sorted and weighed to determine the relative proportions by weight of specific wastes in the individual ZW bin program streams. These relative proportions were applied to the 2014 annual weight information by ZW stream provided by the service providers. In this way, it is possible to determine contamination levels and identify specific materials that are being improperly disposed in these "mixed" waste streams.



One project manager and three waste analysts sorted, quantified and recorded the waste generated over a 24-hour sample accumulation period. In order to identify opportunities to improve waste diversion at specific functional areas within the campus, the Davis campus was divided into 20 areas for the purpose of the waste audit which represented most but not all of the campus. The areas audited are presented below:

Wing/Building	Area
B Wing 1st Floor	Animal Care
B Wing 1st Floor	Bookstore
B Wing 1st Floor	Cafeteria - front of house (2 levels)
B Wing 1st Floor	Cafeteria-back of house (kitchen)
B Wing 1st Floor	Common Hallway
B Wing 2nd Floor	Common Hallway
B Wing 2nd Floor	Registration Office (B201/B230/B236)
C Wing 1st Floor	Common Hallway
C Wing 1st Floor	Gym Area, Weight Room, Athletic Offices
C Wing 1st Floor	Labs -mech eng (rooms C162, C164, C172, C131)
C Wing 2nd Floor	Common Hallway
C Wing 2nd Floor	Health Centre (C210)
H Wing	1st Floor
H Wing	2 <sup>nd</sup> Floor
H Wing	3rd Floor
J Wing	1st Floor
J Wing	2 <sup>nd</sup> Floor
J Wing	3rd Floor
M Building	One Floor
Student Centre	1st & 2nd Floor

ZW bin material streams were collected by the cleaning personnel and labeled as to the area from where it was generated. The ZW mixed recycling, organics and waste to landfill bags were collected on-site and delivered to a designated area for sorting and weighing. All bags were sorted by generation area and ZW bin type (organics, recycling, waste to landfill), opened, and further sorted into labeled collection bins by specific waste category (Appendix). A Digital Receiving Scale was used for all measurements to the nearest one thousandth decimal. All recyclable material and organic material removed from the waste were discarded in appropriate containers for landfill diversion.

At the Davis Campus, Spinnaker sorted, weighed and evaluated over 115 kilograms of organics, 127 kilograms of mixed recycling, and 158 kilograms of waste to landfill. Ten areas were audited on the first day and ten areas were audited on the second audit day.

Because the Trafalgar and Davis campuses are of similar size, have similar functional areas including classrooms, offices, hallways, washrooms, have the same ZW bin program in place and because historical evidence suggest the material generation and disposal practices at the two campuses will be similar, the material breakdown data from the waste audit at the 2015 waste audit at Davis Campus was used in conjunction with the annual waste generation data provided by the service providers for Trafalgar. In this way the 2015 Trafalgar Campus waste audit reported in the appendix is an amalgamation of 2014 weight-based information by stream for the Trafalgar campus and the relative proportion by weight of the mixed waste ZW stream from the Davis Campus 2015 audit. Beyond the reporting of waste diversion at Trafalgar and the

inclusion of completed Ministry Environment waste audit reports in the appendix, the body of this report deals with the 2015 waste audit at the Davis Campus.

Specific waste categories were established before the audit based on *Ontario Ministry of Environment* guidelines and industry best practices. Additional categories were added to the list based on the waste composition observed during the audit. Though this facility is not designated by regulation, this audit surpasses the requirements outlined in the *Ontario Ministry of Environment's <u>Guide to Waste Audits and Waste Reduction Work Plans</u> and includes completed Ministry required audit report forms in the Appendix.* 

The annual diversion rate was calculated by adding total recycled with total reused and dividing by the amount of total waste generated. Annual Diversion Rate = (Total Recycled+Total Reused) / (Total Recycled+Total Reused+Total Landfilled).

#### 1.3 DAVIS CAMPUS: OBSERVATIONS

Davis Campus is a college campus managed by Sheridan College in Brampton, Ontario. The campus has a total of four buildings covering 647,888 square feet. There are 12,024 students attending this campus with 1,393 staff.

Davis Campus of Sheridan College is committed to its Zero Waste Program: a program guiding the institution to becoming a zero waste campus by 2020. An integral part of the program, the Zero Waste (ZW) stations were introduced to increase waste diversion at Sheridan. These ZW stations have replaced the old waste bins in the public and office areas in all of the four campuses. Three waste streams are provided: Organics, Mixed Recycling, and Waste to Landfill (see photo). All ZW stations have the same order, colour coding, labeling and signage.

ZW bins were rolled out in August 2014 at the Davis campus, so participation and compliance with the ZW bin program is low but is expected to rise markedly over 2015 with ongoing active engagement and as the program matures.

Cleaning of this facility is completed by a team of cleaners who use a cart system for the collection of the ZW bin material from the office staff and students. The different ZW streams are collected daily on an as needs basis. The campus operates 7 days a week with offices open generally 5 days a week during normal business hours while other



buildings such as the library are open on weekends with shortened hours. At the time of the audit there were regular classes and no unusual activities taking place in the building that may have altered the audit results.

Staff collect materials from the three stream ZW bins and deposit the bags in dedicated receptacles: roll-carts for the organics, a compactor for the mixed recycling and a compactor for the waste to landfill. While there is a well established protocol using three distinct bag types/colours for the three ZW bin streams, more enhanced signage in and around each of the compactors and roll-cart area is recommended to ensure that the right materials consistently end up in the right containers.

Cleaning/janitorial staff seem well engaged at this site, but the food service team does not appear to have been trained or equipped with adequate containers/bags/information regarding back of house diversion programs.

Grounds keeping contractors/staff would benefit from access to and training on the program as well. There was no readily available container infrastructure for them to work with in their service area.

#### 1.4 DAVIS CAMPUS: WASTE DIVERSION

Analysis of all the specific wastes to be removed from Sheridan College Davis Campus in 2015 reveals that the campus could potentially achieve a waste diversion rate of 84.10% through the existing diversion programs. Figure 1 below shows the weight of the specific wastes being disposed at the campus in 2015 grouped by existing diversion, reuse and waste to landfill programs. This figure represents the Davis campus potential for waste diversion using existing programs and assumes a 100% capture rate for all programs.

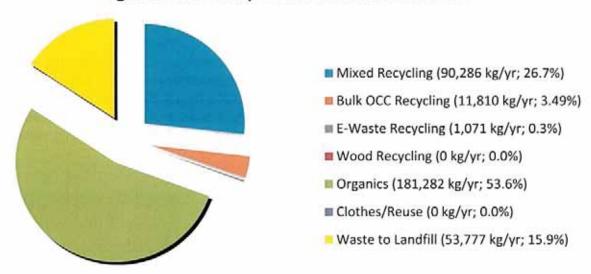


Figure 1: Davis Campus 2015 Material Generation

Using 2014 weight data from service providers (corrected for the part year organic program implementation in 2014), the Davis waste diversion rate for 2015 is projected to be 29.52%. Figure 2 below shows the 2015 weight of material being collected through the existing waste collection programs. This represents actual waste diversion in 2015 at the Campus.

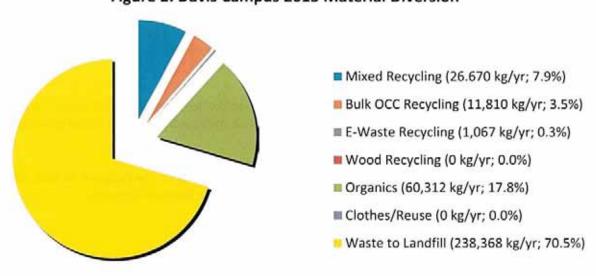


Figure 2: Davis Campus 2015 Material Diversion

Figure 3 below shows the capture rates by the individual collection programs. Davis Campus divert different materials. Capture rates were calculated as follows:

- Mixed Recycling: (Total weight of all recyclable material captured by ZW mixed recycling stream exclusive of organic and waste contaminants) divided by (the total of all recyclable material captured in all 3 ZW bin streams)
- Bulk OCC: Total weight of all old corrugated cardboard captured by bulk OCC divided by total amount
  of OCC captured by bulk OCC (non-bulk OCC missing the ZW bin program is captured in the ZW mixed
  recycling)
- E-Waste: (Total weight of all E-waste captured by E-waste program) divided by (the total of all E-waste captured by E-waste programs plus E-waste captured in all 3 ZW bin streams)
- Wood: (Total weight of all wood captured by wood recycle program) divided by (the total of all wood captured by wood recycle program plus wood captured in all 3 ZW bin streams)
- Organics: (Total weight of all organics captured by ZW organics stream exclusive of mixed recycling and waste contaminants) divided by (the total of all organics captured in all 3 ZW bin streams)
- Clothes: (Total weight of all clothes captured by clothing reuse program) divided by (the total of all clothes captured by clothing reuse program plus clothes captured in all 3 ZW bin streams)

The bulk OCC and E-waste collection programs have a 100% capture rate; while the organics and mixed recycling capture rates are below 25%. There is no clothing reuse program and no wood recycle program at this campus and because there was no clothing or wood in the waste audit, it would appear there is no need to implement clothing reuse or wood collection at this time.

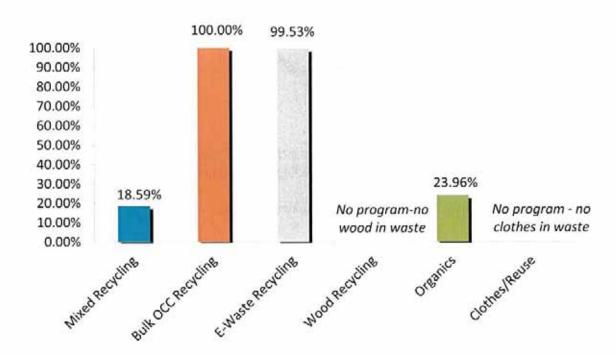


Figure 3: Davis Capture Rates by Collection Programs

Upon analysis of the capture rates for the individual diversion programs it is apparent that both the ZW mixed recycling and organics bins are not being fully utilized and increasing campus wide participation in the ZW bins will be key to improving diversion at this campus.

#### 1.5 DAVIS CAMPUS: MIXED RECYCLING COMPOSITION

The top 10 most commonly disposed contaminants (i.e. non-recyclable specific wastes) disposed in the ZW mixed recycling at Davis are presented in the Figure below. Specific wastes are colour coded: green are suitable for ZW organic bin, black are suitable for ZW waste to landfill bin and purple are reducible wastes.

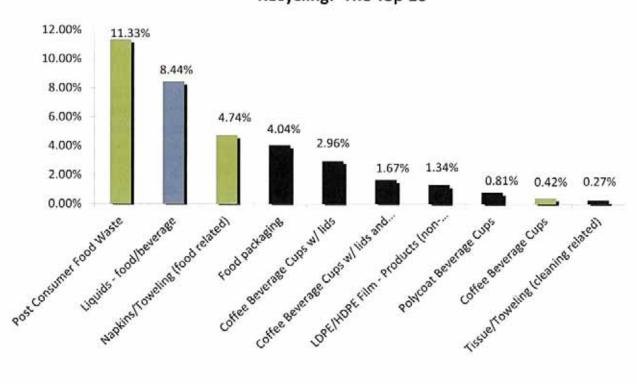


Figure 4: Davis Percent by Weight of Contaminants in Mixed Recycling: The Top 10

The waste reduction workplan should focus on those contaminants that can with minimal effort and cost be managed to be suitable for inclusion in ZW mixed recycling or eliminated from improper disposal. These include:

- Minimizing post-consumer food waste and napkins/toweling in mixed recycling through education/signage.
- Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable.
- Encouraging removal of lids and sleeves from coffee cups prior to placement in ZW organics bin through education/signage. Coffee beverage cups are only acceptable in the ZW organics program when the lids and sleeves are removed, otherwise they are waste to landfill.

#### 1.6 DAVIS CAMPUS: ORGANIC COMPOSITION

The top 10 most commonly disposed contaminants (i.e. non-organic specific wastes) disposed in the ZW organics bins are presented in the Figure below. Specific wastes are colour coded: blue are suitable for ZW mixed recycling bin and black are suitable for ZW waste to landfill bin.

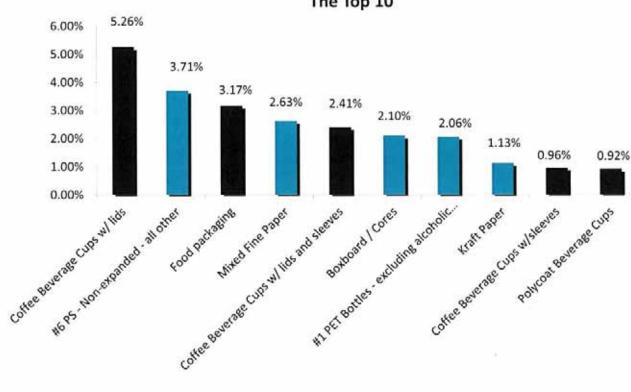


Figure 5: Davis Percent by Weight of Contaminants in Organics: The Top 10

The waste reduction workplan should focus on those contaminants that can with minimal effort and cost be managed to be suitable for inclusion in ZW organics or eliminated from improper disposal. These include:

- Encouraging removal of lids and sleeves from coffee cups prior to placement in ZW organics bin through education/signage. Coffee beverage cups are only suitable for the ZW organics program when the lids and sleeves are removed, otherwise they are waste to landfill.
- Encouraging the proper disposal in mixed recycling of polystyrene, mixed fine paper, boxboard/cores and kraft paper through education/signage.
- Encouraging the emptying of food waste in the organics bin, then the disposal of the food packaging in the appropriate ZW recycling or ZW organics bin through education/signage.

#### 1.7 DAVIS CAMPUS: WASTE TO LANDFILL COMPOSITION

The top 10 most commonly disposed contaminants (i.e. organic or mixed recyclable wastes) disposed in the ZW waste to landfill bins at Davis are presented in the Figure below. Specific wastes are colour coded: blue are suitable for ZW mixed recycling bin, green are suitable for ZW organics bin and purple are reducible.

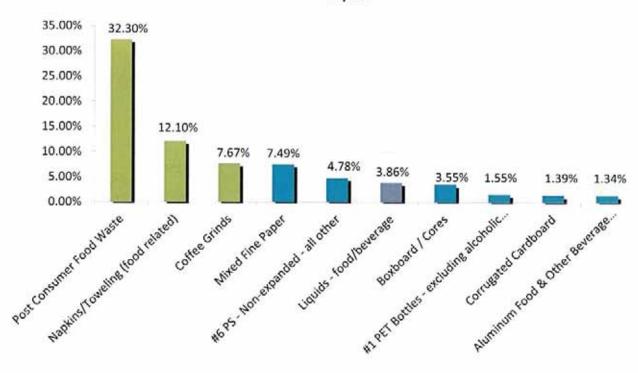


Figure 6: Davis Percent by Weight of Contaminants in Waste to Landfill: The Top 10

Analysis of the ZW bin streams at this campus has indicated that the most significant impediment to improved diversion is the use of the ZW waste to landfill bin for the disposal of both organic and mixed recycling. The waste reduction workplan must focus on those contaminants that can with minimal effort and cost be managed to be suitable for inclusion in ZW organics or eliminated from improper disposal. These include:

- Encouraging the emptying of food waste, napkins and coffee grinds in the organics bin, then the disposal of the food packaging in the appropriate ZW recycling or ZW organics bin through education/signage.
- Encouraging the proper disposal in mixed recycling of polystyrene, mixed fine paper, boxboard/cores, PET bottles, corrugated cardboard and aluminum cans through education/signage.
- Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable.

### 1.8 DAVIS CAMPUS: CONTAMINATION OF ZW BINS BY AREA

The contamination rates for each of the 20 areas sampled during the audit were analyzed to find the best and the worst performers. This analysis was done for all three ZW bins streams.

Table 1 below presents the percentage by weight of contaminants in ZW mixed recycling by area sorted to present the worst to the best performers. The average contamination rate of ZW mixed recycling at Davis campus is 37.07%. The average is the sum of the weights of the contaminants in the ZW mixed recycling bin in all twenty areas audited divided by the total amount of ZW mixed recycling material sorted. The Student Centre, Animal Care and Registration Offices had the least contamination in the ZW recycling bins; while the Health Centre, H Wing 2<sup>nd</sup> Floor and CW Wing 1<sup>st</sup> Floor Common Hallway had the worst.

Table 1: Percentage of Contaminants in ZW Mixed Recycling By Area: The Worst to the Best Performers

Wing/Building Area		Contaminants in Recycling
C Wing 2nd Floor	Health Centre (C210)	63.98%
H Wing	2nd Floor	62.64%
C Wing 1st Floor	Common Hallway	57.75%
B Wing 1st Floor	Cafeteria-back of house (kitchen)	53.22%
H Wing	3rd Floor	48.11%
C Wing 1st Floor	Gym Area, Weight Room, Athletic Offices	47.35%
B Wing 1st Floor	Cafeteria - front of house (2 levels)	46.73%
J Wing	2nd Floor	39.58%
J Wing	3rd Floor	34.29%
J Wing	1st Floor	34.25%
H Wing	1st Floor	32.57%
B Wing 2nd Floor	Common Hallway	29.54%
B Wing 1st Floor	Common Hallway	28.15%
C Wing 2nd Floor	Common Hallway	25.76%
M Building	One Floor	24.45%
B Wing 2nd Floor	Registration Office (B201/B230/B236)	13.63%
B Wing 1st Floor	Animal Care	11.63%
Student Centre	1st & 2nd Floor	3.51%
C Wing 1st Floor Labs -mech eng (rooms C162, C164, C172, C131)		No data
B Wing 1st Floor Bookstore		No data

Table 2 below presents the percentage by weight of contaminants in ZW organics by area sorted to present the worst to the best performers. The average contamination rate of ZW organics at the Davis campus is 29.97%. The average is the sum of the weights of the contaminants in the ZW organics bin in all twenty areas audited divided by the total amount of ZW organics material sorted. The Student Centre, Animal Care, C Wing 1st Floor Hallway had the least contamination in the ZW organic bins; while all three floors of the J Wing had the worst.

Table 2: Percentage of Contaminants in ZW Organics By Area: The Worst to the Best Performers

Wing/Building	Area	Contaminants in Organics
J Wing	3rd Floor	46.87%
J Wing	2nd Floor	45.79%
J Wing	1st Floor	44.94%
C Wing 2nd Floor	Health Centre (C210)	42.98%
H Wing	3rd Floor	40.15%
C Wing 2nd Floor	Common Hallway	35.88%
H Wing	1st Floor	33.34%
C Wing 1st Floor	Gym Area, Weight Room, Athletic Offices	32.99%
B Wing 2nd Floor	Common Hallway	31.94%
B Wing 1st Floor	Common Hallway	31.82%
B Wing 1st Floor	Cafeteria - front of house (2 levels)	28.48%
H Wing	2nd Floor	26.57%
M Building	One Floor	25.31%
C Wing 1st Floor	Common Hallway	14.80%
B Wing 1st Floor	Animal Care	14.36%
Student Centre	1st & 2nd Floor	0.00%
B Wing 1st Floor	Cafeteria-back of house (kitchen)	No data
B Wing 2nd Floor	Registration Office (B201/B230/B236)	No data
C Wing 1st Floor	Labs -mech eng (rooms C162, C164, C172, C131)	No data
B Wing 1st Floor	Bookstore	No data

Table 3 below presents the percentage by weight of contaminants in ZW waste to landfill by area sorted to present the worst to the best performers. The average contamination rate of ZW waste to landfill at the Davis campus is 82.87%. The average is the sum of the weights of the contaminants in the ZW waste to landfill bin in all twenty areas audited divided by the total amount of ZW waste to landfill material sorted. The C Wing Mechanical Engineering Labs, H Wing 3<sup>rd</sup> Floor & B Wing 2<sup>nd</sup> Floor Common Hallway had the least contamination in the ZW waste to landfill bins; while the Student Centre, B Wing 1<sup>st</sup> Floor Common Hallway & B Wing Registration Office had the worst.

Table 3: Percentage of Contaminants in ZW Waste to Landfill By Area: The Worst to the Best Performers

Wing/Building	Area	Contaminants in Waste (Landfill)
Student Centre	1st & 2nd Floor	95.58%
B Wing 1st Floor	Common Hallway	92.75%
B Wing 2nd Floor	Registration Office (B201/B230/B236)	91.49%
J Wing	1st Floor	90.67%
B Wing 1st Floor	Animal Care	85.92%
C Wing 1st Floor	Common Hallway	85.39%
B Wing 1st Floor Cafeteria - front of house (2 levels)		84.19%

J Wing	3rd Floor	83.47%
C Wing 2nd Floor	Common Hallway	81.61%
C Wing 2nd Floor	Health Centre (C210)	79.21%
C Wing 1st Floor	Gym Area, Weight Room, Athletic Offices	77.63%
J Wing	2nd Floor	75.42%
H Wing	1st Floor	74.97%
M Building	One Floor	74.81%
H Wing	2nd Floor	72.48%
B Wing 2nd Floor	Common Hallway	70.59%
H Wing	3rd Floor	55.07%
C Wing 1st Floor	Labs -mech eng (rooms C162, C164, C172, C131)	37.33%
B Wing 1st Floor	Cafeteria-back of house (kitchen)	No data
B Wing 1st Floor	Bookstore	No data

The most significant contamination in the three worst performing areas was largely attributed to the presence of significant quantities of organic waste; however the B Wing 1<sup>st</sup> Floor Common Hallway waste to landfill bin was contaminated by significant amounts of fine paper as well as organics.

#### 1.9 DAVIS CAMPUS: SUMMARY OF RECOMMENDATIONS

#### Campus Wide Focus:

- Improving capture rate in the ZW organics containers.
- 2. Improving capture rate in the ZW mixed recycling program.
- Improving diversion performance campus-wide as there was little variation in performance with the
  exception of H-Wing 3<sup>rd</sup> Floor and Labs (Mech Eng Rooms C162, C164, C172, C131) which had a slightly
  lower contamination rate in the waste to landfill than other areas.

#### Specific Recommendations:

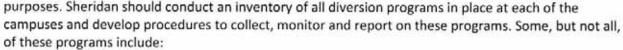
- Enhancing Organic Recovery: Encouraging the emptying of food waste and napkins in the organics bin, then the disposal of the food packaging in the appropriate ZW recycling or ZW waste to landfill bin through education/signage. For example, utilize new student packages, environmental and zero waste pledges, student run zero waste events and sorting challenges. Expected improvement in capture rate of 20%.
- 2. Enhancing Mixed Recycling: Encouraging the proper disposal in mixed recycling of polystyrene, mixed fine paper, boxboard/cores, PET bottles, corrugated cardboard, kraft paper and aluminum cans through education/signage. For example, utilize new student packages, environmental and zero waste pledges, student run zero waste events and sorting challenges. Expected improvement in capture rate of 20%.

#### 3. Coffee Cup Handling:

 Encouraging removal of lids and sleeves from coffee cups prior to placement in ZW organics bin through education/signage. Coffee beverage cups are only acceptable in the ZW organics program when the lids and sleeves are removed, otherwise they are waste to landfill. Expected improvement in capture rate of 25%.

OR

- b. Change to a system/supplier that accepts coffee cups in whole/part with and without lids/sleeves to streamline and simplify the diversion of these items through a single stream recycling program instead of organics program. Also capture polycoat coffee cups in recycling program. Expected improvement in capture rate of 50% plus 50% of all polycoat beverage cups.
- 4. Emptying Beverage Containers: Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable. Potential to use ZW water bottle stations where installed (photo). Expected reduction in liquid disposal in all streams: 40%
- 5. Capturing & Reporting Material Weights for All Diversion
  Programs at the Campus: There are several additional
  diversion programs in place at the Davis Campus but the
  weight-based data is not currently captured for reporting
  purposes. Sheridan should conduct an inventory of all diversion program



- Wood Pallet Returns (Re use)
- Furniture Donations (Re use)
- Writing Supplies Recycling

Expected improvement in waste diversion is significant, but not quantifiable at this time.

#### Anticipated Result:

With the implementation of the above noted waste reduction plans, it is estimated that the waste diversion rate at the Davis Campus will increase from 29.52% to 43.88% in 2016. A combination of the conservative method used to calculate waste diversion using 2014 weight information when the campus has only recently implemented the ZW bin program, combined with the lack of information on capturing and reporting on all diversion programs (see recommendation 5 above), suggests that 2016 waste diversion at this campus could significantly exceed the 43.88% estimated in this report.



#### APPENDICES

#### GLOSSARY OF WASTE TERMS

In order to reduce potential confusion that may arise from the use of terms in this report, the following is a brief description of the waste and waste diversion terms.

#### TOTAL WASTE GENERATED

Total waste generated refers to all materials generated by the Facility's operations.

Total Waste Generated = Waste Disposed + Material Recovered From 3Rs Programs

#### RECOVERED WASTE

Recovered waste refers to materials diverted from the Facility's waste stream and from landfill as a result of 3Rs Programs.

#### CAPTURE RATES

Recycling rates for the Facility's 3Rs Programs based on the amount of material recovered versus the amount of the same material disposed into the waste stream.

Capture Rate = Recycled or Reused Material / (Material Disposed + Recycled or Reused)

#### ANNUAL DIVERSION RATE

The Facility's annual diversion rate is the percentage of waste material that it diverts from landfill versus what it generates in total.

Annual Diversion Rate = 3Rs Programs / Total Waste Generated

#### ONTARIO'S 60% REDUCTION TARGET

The Ontario Ministry of Environment's 60% reduction target is a comparison between a Facility's current year waste to landfill figure and a figure obtained from an earlier base year.

60% Reduction Target = (Waste Disposed 2015 - Waste Disposed Base Year) / Waste Disposed Base Year

## SPECIFIC WASTE CATEGORIES & WASTE AUDIT DATA (DAVIS CAMPUS)

The following is the list of specific wastes, the associated appropriate waste management collection program, the totals of specific wastes in the samples at the Davis Campus, the percent by weight of the specific waste in the ZW stream and the estimated amount of the specific waste in that stream collected annually. The specific wastes are listed alphabetically within the appropriate zero waste (ZW) collection grouping.

Specific Waste Category	Acceptable in ZW Bin Program (Recycling, Organics, Waste)	Recycle Sample (kg)	Organic Sample (kg)	Waste Sample (kg)	Recycle Percent by Weight	Organic Percent by Weight	Waste Percent by Weight	Recycle Annual (kg)	Organic Annual (kg)	Waste Annual (kg)
#1 PET - clear thermoform packaging	Mixed Recycling	0.884	0.168	0.318	0.7%	0.1%	0.2%	184.8	88.1	479.0
#1 PET - other thermoform (coloured)	Mixed Recycling	0.193	0.000	0.048	0.2%	0.0%	0.0%	40.3	0.0	72.7
#1 PET Bottles - excluding alcoholic beverage	Mixed Recycling	10.141	2.381	2.451	7.9%	2.1%	1.6%	2,120.0	1,244.5	3,696.0
#2 HDPE Bottles and Jugs	Mixed Recycling	0.249	0.102	0.175	0.2%	0.1%	0.1%	52.1	53.4	263.8
#2 Other HDPE Containers	Mixed Recycling	0.000	0.022	0.000	0.0%	0.0%	0.0%	0.0	11.5	0.0
#5 Other PP Containers	Mixed Recycling	0.578	0.041	0.280	0.5%	0.0%	0.2%	120.9	21.4	422.7
#6 PS - Non- expanded - all other	Mixed Recycling	9.275	4.279	7.559	7.3%	3.7%	4.8%	1,939.0	2,236.5	11,398.9
#7 Other Plastics	Mixed Recycling	0.084	0.067	0.480	0.1%	0.1%	0.3%	17.6	35.0	723.2
Aluminum Aerosol Containers	Mixed Recycling	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0	0.0	0.0
Aluminum Foil & Foil Trays	Mixed Recycling	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0	0.0	0.0
Aluminum Food & Other Beverage Cans	Mixed Recycling	2.865	0.548	2.121	2.2%	0.5%	1.3%	599.0	286.7	3,198.7
Aseptic Containers - (excluding alcoholic beverages)	Mixed Recycling	0.368	0.580	0.382	0.3%	0.5%	0.2%	76.8	302.9	576.5
Aseptic Containers -	Mixed Recycling	0.042	0.000	0.000	0.0%	0.0%	0.0%	8.8	0.0	0.0

alcoholic beverages										
Boxboard / Cores	Mixed Recycling	7.991	2,423	5.604	6.3%	2.1%	3.5%	1,670.5	1,266.5	8,451.7
Clear Alcoholic Beverage Glass	Mixed Recycling	0.000	0.000	0.310	0.0%	0.0%	0.2%	0.0	0.0	467.5
Clear Glass Other Beverage and Food	Mixed Recycling	2.578	0.288	0.580	2.0%	0.2%	0.4%	539.0	150.7	875.2
Coloured Glass Other Beverage and Food	Mixed Recycling	0.405	0.000	0.000	0.3%	0.0%	0.0%	84.7	0.0	0.0
Gable Top Containers	Mixed Recycling	1.559	0.668	1.375	1.2%	0.6%	0.9%	326.0	349.4	2,073.6
Kraft Paper	Mixed Recycling	2.527	1.298	1.734	2.0%	1.1%	1.1%	528.3	678.7	2,615.4
Large HDPE & PP Pails & Lids	Mixed Recycling	1.669	0.000	0.000	1.3%	0.0%	0.0%	348.8	0.0	0.0
Milk Bladder	Mixed Recycling	0.000	0.000	0.359	0.0%	0.0%	0.2%	0.0	0.0	542.0
Mixed Fine Paper	Mixed Recycling	24.190	3.034	11.843	19.0%	2.6%	7.5%	5,056.9	1,585.9	17,860.3
Molded Pulp/Fibre	Mixed Recycling	2.028	0.383	0.843	1.6%	0.3%	0.5%	424.0	200.2	1,271.7
Newspaper - Other	Mixed Recycling	0.000	0.000	0.171	0.0%	0.0%	0.1%	0.0	0.0	257.9
Newspaper – Dailys and Weeklys	Mixed Recycling	0.271	0.000	0.190	0.2%	0.0%	0.1%	56.7	0.0	286.5
Other Metal	Mixed Recycling	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0	0.0	0.0
Other Paper (paper plates)	Mixed Recycling	0.889	0.180	0.760	0.7%	0.2%	0.5%	185.9	93.8	1,145.7
Rubber & Nitrile Gloves	Mixed Recycling	0.088	0.062	0.945	0.1%	0.1%	0.6%	18.3	32.3	1,424.7
Steel Aerosol Cans	Mixed Recycling	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0	0.0	0.0
Steel Food & Other Beverage Cans	Mixed Recycling	0.054	0.142	0.364	0.0%	0.1%	0.2%	11.2	74.1	548.4
Textiles	Mixed Recycling	0.000	0.000	0.256	0.0%	0.0%	0.2%	0.0	0.0	386.1
Corrugated Cardboard	Mixed & OCC Recycling	11.351	0.552	2.202	8.9%	0.5%	1.4%	2,372.9	288.4	3,321.4
Batteries	E-Waste Recycling	0.024	0.000	0.000	0.0%	0.0%	0.0%	5.0	0.0	0.0
Computer Peripherals	E-Waste Recycling	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0	0.0	0.0
Mixed (E-waste collection program)	E-Waste Recycling							0.0		

Grand Total		127.57 5	115.39 2	158.06 2	100.0%	100.0%	100.0%	26,670. 0	60,312. 0	238,368 0
Other Non- Recyclable Material	Landfill									
Tissue/Toweling (cleaning related)	Landfill	0.342	0.000	0.634	0.3%	0.0%	0.4%	71.5	0.0	955.7
Spiral Wound Containers	Landfill	0.064	0.000	0.037	0.0%	0.0%	0.0%	13.3	0.0	55.8
Polycoat Beverage Cups	Landfill	1.037	1.057	2.104	0.8%	0.9%	1.3%	216.7	552.6	3,173.4
Office Waste	Landfill	0.038	0.012	0.159	0.0%	0.0%	0.1%	7.9	6.3	239.2
Masking Tape	Landfill	0.138	0.000	0.790	0.1%	0.0%	0.5%	28.8	0.0	1,191.4
Maintenance Waste	Landfill	0.227	0.004	0.706	0.2%	0.0%	0.4%	47.5	2.1	1,064.3
LDPE/HDPE Film - Products (non- packaging)	Landfill	1.706	0.151	2.672	1.3%	0.1%	1.7%	356.6	79.0	4,029.8
Laminated Paper Packaging	Landfill	0.036	0.042	0.134	0.0%	0.0%	0.1%	7.4	22.0	202.4
Lab Waste	Landfill	0.029	0.000	3.647	0.0%	0.0%	2.3%	6.1	0.0	5,499.2
Food packaging	Landfill	5.156	3.657	8.094	4.0%	3.2%	5.1%	1,077.9	1,911.4	12,206.
Coffee Polycoat Beverage Cups w/sleeves	Landfill	0.196	1.104	0.382	0.2%	1.0%	0.2%	41.1	577.2	576.3
Coffee Polycoat Beverage Cups w/ lids and sleeves	Landfill	2.129	2.777	2.137	1.7%	2.4%	1.4%	445.0	1,451.5	3,223.5
Coffee Polycoat Beverage Cups w/ lids	Landfill	3.773	6.068	4.295	3.0%	5.3%	2.7%	788.8	3,171.4	6,477.6
Coffee pods	Landfill	0.112	0.000	0.366	0.1%	0.0%	0.2%	23.4	0.0	551.3
#6 PS - Expanded polystyrene	Landfill	0.308	0.187	0.921	0.2%	0.2%	0.6%	64.5	97.8	1,388.5
(washroom related)	Organics Reuse	0.187	0.000	0.113	0.1%	0.0%	0.1%	39.1	0.0	170.4
Post Consumer Food Waste Tissue/Toweling	Organics	14.451	74.060	51.058	11.3%	64.2%	32.3%	3,021.0	38,709. 3	76,998.
Napkins/Towelin g (food related)	Organics	6.047	4.845	19.131	4.7%	4.2%	12.1%	1,264.1	2,532.2	28,850.
Liquids - food/beverage	Organics	10.766	0.907	6.101	8.4%	0.8%	3.9%	2,250.6	474.2	9,200.
Coffee Polycoat Beverage Cups	Organics	0.532	3,301	1.104	0.4%	2.9%	0.7%	111.2	1,725.2	1,665.5
Coffee Grinds	Organics	0.000	0.000	12.128	0.0%	0.0%	7.7%	0.0	0.0	18,289
Avoidable Food Waste	Organics	0.000	0.000	0.000	0.0%	0.0%	0.0%	0.0	0.0	0.0
Wood	Wood Recycling							0.0		

### MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE AUDIT (DAVIS)

Industrial, Commercial and Institutional Establishments As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request. For large construction and demolition projects, please refer to the forms included with "A Guide to Waste Audits and Waste Reduction Work Plans for Construction and Demolition Projects as Required Under Ontario Regulation 102/94" (revised July 2008).

#### I. General Information (Davis)

Name of Owner and/or Operator of Sheridan College Institute of Techno		\$1
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Davis Campus of Sheridan College		
Municipality:		
Brampton, ON Canada Type of entity		
Educational Institution		

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

#### II.Description of Entity (Davis)

Provide a brief overview of the entity(ties):

Davis Campus is a college campus managed by Sheridan College in Brampton, Ontario. The campus has a total of four buildings covering 647,888 square feet. There are 12,024 students attending this campus with 1,393 staff.

This waste audit was conducted in April 2015 at this Sheridan College Campus. The Zero Waste streams which include mixed recycling, organics and waste-to-landfill were audited for the purpose of identifying current diversion rates by specific waste category and to calculate contamination rates. A 24 hour sample of organics, mixed recycling and waste-to-landfill was sorted and weighed in each of the 20 areas audited. Weight based generation information from 2014 for the waste and diversion programs were obtained from the service provider(s) and were used in the calculation of diversion rates.

At the time of the audit, the campus had fully implemented the following collection programs:

- 1. Mixed Recycling (co-mingle including glass, metal, paper, plastic, paper)
- 2. Organics
- 3. Waste to Landfill
- 4. Bulk old corrugated cardboard (OCC) Recycling
- 5. E-Waste Campus Program & E-Waste Day Event (combined in this report)

# III. How Waste is Produced And Decisions Affecting the Production of Waste (Davis)

	to the production of waste.  How Is the Waste Produced and What Management
Categories of Waste	Decisions/Policies Affect Its Production?
Example: Disposable Food Packaging	Generated by customers eating inside restaurant. Food packaging is used for health reasons. Reusable mugs for customers consuming coffee/tea inside restaurant is being reviewed.
#1 PET - clear thermoform packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#1 PET - other thermoform (coloured)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#1 PET Bottles - excluding alcoholic beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students. ZW water bottle refill stations installed to reduce PET water bottle generation/disposal.
#2 HDPE Bottles and Jugs	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#2 Other HDPE Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#5 Other PP Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#6 PS - Non-expanded - all other	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#7 Other Plastics	Minimal amounts generated on campus.
Aluminum Aerosol Containers	Minimal amounts generated on campus.
Aluminum Foil & Foil Trays	Minimal amounts generated on campus.
Aluminum Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Aseptic Containers - (excluding alcoholic beverages)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Aseptic Containers - alcoholic beverages	Not for sale on campus. If exist brought in by staff/students. Minimal amounts generated on campus.

Boxboard / Cores	Generated all over the campus as a packaging material for food products, office products and class material supplies.				
Clear Alcoholic Beverage Glass	Minimal amounts generated on campus.				
Clear Glass Other Beverage and Food	Minimal amounts generated on campus.				
Coloured Glass Other Beverage and Food	Minimal amounts generated on campus.				
Gable Top Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students				
Kraft Paper	Paper products generated through campus activities.  Most generated in printing and photocopying areas.				
Large HDPE & PP Pails & Lids	Minimal amounts generated on campus.				
Milk Bladder	Minimal amounts generated on campus.				
Mixed Fine Paper	Paper products generated through campus activities.				
Control of the Contro	Most generated in printing and photocopying areas.				
Molded Pulp/Fibre	Food packaging, beverage containers and organic waste is				
AND THE PROPERTY OF THE PROPER	available for sale at Campus cafeteria and is brought to				
	campus by staff/faculty and students				
Newspaper - Other	Available for sale at Campus. Most should be captured in				
	the ZW mixed recycling.				
Newspaper – Dailys and Weeklys	Available for sale at Campus. Most should be captured in				
F (HE) (1) A 15 S (1) (1) (1) A 12 S (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	the ZW mixed recycling.				
Other Metal	Minimal amounts generated on campus.				
Other Paper (paper plates)	Minimal amounts generated on campus.				
Rubber & Nitrile Gloves	Minimal amounts generated on campus.				
Steel Aerosol Cans	Minimal amounts generated on campus.				
Steel Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students				
Textiles	Minimal amounts generated in campus.				
Corrugated Cardboard	Generated in receiving area through delivery. Almost all captured in bulk recycling program.				
Batteries	Minimal amounts generated in campus.				
Computer Peripherals	Minimal amounts generated in campus.				
Mixed (E-waste collection program)	Generated throughout campus.				
Wood	Little to none generated at this campus.				
Avoidable Food Waste	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students.				
Coffee Grinds	Generated at coffee stations throughout the campus.				
Coffee Beverage Cups	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students.				
Liquids - food/beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students.				

Napkins/Toweling (food related)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Post Consumer Food Waste	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Tissue/Toweling (washroom related)	Have been removed from washrooms. Only minimal amounts generated (<.5% of total waste)
Clothes	Little generated at the campus. Likely lost or intentionally disposed articles of clothing.
#6 PS - Expanded polystyrene	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee pods	Little generated at coffee stations around the campus.
Coffee Beverage Cups w/ lids	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee Beverage Cups w/ lids and sleeves	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee Beverage Cups w/sleeves	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Food packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Lab Waste	Generated all over the campus.
Laminated Paper Packaging	Minimal amounts generated on campus.
LDPE/HDPE Film - Products (non-packaging)	Generated all over the campus.
Maintenance Waste	Minimal amounts generated on campus.
Masking Tape	Minimal amounts generated on campus.
Office Waste	Minimal amounts generated on campus.
Polycoat Beverage Cups	Not available for sale on campus as not included in ZW recycling program. Likely brought in from off-site vendors by students/staff.
Spiral Wound Containers	Minimal amounts generated on campus.
Tissue/Toweling (cleaning related)	Minimal amounts generated on campus.
Other Non-Recyclable Material	Minimal amounts generated on campus.

Note: When completing this form, write "n/a" in the columns where the entity will not produce any waste for a category of waste.

# IV. Management of Waste (Davis)

Category	Waste to be Disposed	Reused or Recycled Waste
Example: Beverage cans	Staff/clients may place in garbage bins	Staff/clients place cans in recycling receptacles. Collection staff later collect cans. Those in garbage are disposed; those in recycling receptacles are recycled.
#1 PET - clear thermoform packaging		Should be included in ZW Recycling Bin Program though some may end up in landfill
#1 PET - other thermoform (coloured)		Should be included in ZW Recycling Bin Program though some may end up in landfill
#1 PET Bottles - excluding alcoholic beverage		Should be included in ZW Recycling Bin Program though some may end up in landfill. Reduction in PET water bottles through installation of reusable water bottle filling stations.
#2 HDPE Bottles and Jugs		Should be included in ZW Recycling Bin Program though some may end up in landfill
#2 Other HDPE Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
#5 Other PP Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
#6 PS - Non-expanded - all other		Should be included in ZW Recycling Bin Program though some may end up in landfill
#7 Other Plastics		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aluminum Aerosol Containers		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aluminum Foil & Foil Trays		Should be included in ZW Recycling Bin Program though some may end up in landfill
Aluminum Food & Other Beverage Cans		Should be included in ZW Recycling Bin Program though some may end up in landfill

Aseptic Containers - (excluding alcoholic beverages)	Should be included in ZW Recycling Bin Program though some may end up in landfill
Aseptic Containers - alcoholic beverages	Should be included in ZW Recycling Bin Program though some may end up in landfill
Boxboard / Cores	Should be included in ZW Recycling Bin Program though some may end up in landfill
Clear Alcoholic Beverage Glass	Should be included in ZW Recycling Bin Program though some may end up in landfill
Clear Glass Other Beverage and Food	Should be included in ZW Recycling Bin Program though some may end up in landfill
Coloured Glass Other Beverage and Food	Should be included in ZW Recycling Bin Program though some may end up in landfill
Gable Top Containers	Should be included in ZW Recycling Bin Program though some may end up in landfill
Kraft Paper	Should be included in ZW Recycling Bin Program though some may end up in landfill
Large HDPE & PP Pails & Lids	Should be included in ZW Recycling Bin Program though some may end up in landfill
Milk Bladder	Should be included in ZW Recycling Bin Program though some may end up in landfill
Mixed Fine Paper	Should be included in ZW Recycling Bin Program though some may end up in landfill
Molded Pulp/Fibre	Should be included in ZW Recycling Bin Program though some may end up in landfill
Newspaper - Other	Should be included in ZW Recycling Bin Program though some may end up in landfill
Newspaper – Dailys and Weeklys	Should be included in ZW Recycling Bin Program though some may end up in landfill
Other Metal	Should be included in ZW Recycling Bin Program though some may end up in landfill

Other Paper (paper plates)	Should be included in ZW Recycling Bin Program though some may end up in landfill
Rubber & Nitrile Gloves	Should be included in ZW Recycling Bin Program though some may end up in landfill
Steel Aerosol Cans	Should be included in ZW Recycling Bin Program though some may end up in landfill
Steel Food & Other Beverage Cans	Should be included in ZW Recycling Bin Program though some may end up in landfill
Textiles	Should be included in ZW Recycling Bin Program though some may end up in landfill
Corrugated Cardboard	Should be included in Bulk OCC capture program in deliveries or ZW Recycling Bins throughout the campus, though some may end up in landfill
Batteries	Should be included in E-Recycling or captured during E-Recycling Events.
Computer Peripherals	Should be included in E-Recycling or captured during E-Recycling Events.
Mixed (E-waste collection program)	Should be included in E-Recycling or captured during E-Recycling Events.
Wood	Little to none generated at this campus
Avoidable Food Waste	Should be included in ZW Organics Bin Program though much ends up in landfill
Coffee Grinds	Should be included in ZW Organics Bin Program though much ends up in landfill
Coffee Beverage Cups	Should be included in ZW Organics Bin Program though much ends up in landfill
Liquids - food/beverage	Should be included in ZW Organics Bin Program though much ends up in landfill
Napkins/Toweling (food related)	Should be included in ZW Organics Bin Program though much ends up in landfill
Post Consumer Food Waste	Should be included in ZW Organics Bin Program though much ends up in landfill

Tissue/Toweling (washroom	Should not be generated at the	
related)	campus as they have been	
**************************************	removed from washrooms	
Clothes		None generated at this campus.
#6 PS - Expanded polystyrene	Little generated and no diversion	
	program currently available.	
Coffee pods	Little generated and no diversion	
	program currently available.	
Coffee Beverage Cups w/ lids		Under current diversion program the lids and sleeves should be removed for ZW recycling and the cup for ZW organics. However much ends up being disposed.
Coffee Beverage Cups w/ lids and sleeves		Under current diversion program the lids and sleeves should be removed for ZW recycling and the cup for ZW organics. However much ends up being disposed.
Coffee Beverage Cups w/sleeves		Under current diversion program the lids and sleeves should be removed for ZW recycling and the cup for ZW organics. However much ends up being disposed.
Food packaging	Little generated and no diversion program currently available.	
Lab Waste	Little generated and no diversion	
200 110312	program currently available.	
Laminated Paper Packaging	Little generated and no diversion	
zammatea i aper i acioging	program currently available.	
LDPE/HDPE Film - Products (non-	Little generated and no diversion	
packaging)	program currently available.	
Maintenance Waste	Little generated and no diversion	
ore annualise de Citalia Rain-Auther (Citalia)	program currently available.	
Masking Tape	Little generated and no diversion	
and the control of th	program currently available.	
Office Waste	Little generated and no diversion	
	program currently available.	
Polycoat Beverage Cups	Not included in current recycling	
	or organics program.	
Spiral Wound Containers	Little generated and no diversion	
	program currently available.	
Tissue/Toweling (cleaning related)	Little generated and no diversion	
The second secon	program currently available.	
Other Non-Recyclable Material	Little generated and no diversion	
	program currently available.	

Note: When completing this form, write "n/a" in the columns where the entity will not produce any waste for a category of waste.

V. Estimated Quantity of Waste Produced Annually – Davis

	Estimated /	Amount of W	Estimated Amount of Waste Produced (kgs)	ed (kgs)								
	Generated			Reused			Recycled			Disposed		
Categories of Waste	"A" Base	"B" *	* "C"	"A"	"B" *	* ,,,,	"A"	8,,	"C" *	"A" Base	"B" *	*,'C',
	Year	Current	Change	Base	Curr	Chang	Base	Current	Change	Year 2012	Current	Change
	2012	Year (kg)	(A-B) (kg)	Year	ent	е	Year	Year (kg)	(A-B)	(kg)	Year (kg)	(A-B)
	(kg)			2012	Year	(A-B)	2012		(kg)			(kg)
				(kg)	(kg)	(kg)	(kg)					
Examples:	100kg	90kg	-10kg	0	0	0	75kg	85kg +	10kg	25kg	5kg	- 20kg
Aluminum food and												
beverage cans												
Cardboard	4t	3.8t	2t	0	0	0	3.2t	3.4t	+.2t .	8t	,4t	4t
Cans/hottles/nlastics												
(2012 grouping)	20,260			0			8,340			11,920		
Paper products (2012												
grouping)	28,140			0			22,810			5,330		
#1 PET - clear												
thermoform												
packaging		773			0			294			479	
#1 PET - other												
thermoform												
(coloured)		113			0			40			73	
#1 PET Bottles -												
excluding alcoholic												
beverage		7,357			0			3,661			3,696	
#2 HDPE Bottles and												
Jugs		382			0			118			264	
#2 Other HDPE												
Containare		14			0			14			0	

#5 Other PP				
Containers	570	0	147	423
#6 PS - Non-expanded				
- all other	16,107	0	4,708	11,399
#7 Other Plastics	784	0	61	723
Aluminum Aerosol	23			
Containers	0	0	0	0
Aluminum Foil & Foil				
Trays	0	0	0	0
Aluminum Food &				
Other Beverage Cans	4,153	0	954	3,199
Aseptic Containers -				
(excluding alcoholic				
beverages)	1,028	0	452	576
Aseptic Containers -				
alcoholic beverages	6	0	0	0
Boxboard / Cores	11,690	0	3,239	8,452
Clear Alcoholic				
Beverage Glass	467	0	0	467
Clear Glass Other				
Beverage and Food	1,601	0	726	875
Coloured Glass Other				
Beverage and Food	85	0	85	0
Gable Top Containers	2,832	0	759	2,074
Kraft Paper	3,984	0	1,369	2,615
Large HDPE & PP Pails				
& Lids	349	0	349	0
Milk Bladder	542	0	0	542
Mixed Fine Paper	24,881	0	7,021	17,860
Molded Pulp/Fibre	1,943	0	672	1,272
Newspaper - Other	258	0	0	258

Newspaper - Dailys												
and Weeklys		343			0			22			287	
Other Metal		0			0			0			0	
Other Paper (paper												
plates)		1,448			0			302			1,146	
Rubber & Nitrile												
Gloves		1,483			0			58			1,425	
Steel Aerosol Cans		0			0			0			0	
Steel Food & Other												
Beverage Cans		651			0			103			548	
Textiles		386			0			0			386	
Corrugated Cardboard	21,970	17,861	-4,109	0	0	0	20,400	14,540	-5,860	1,570	3,321	1,751
Batteries		5			0			5			0	
Computer Peripherals		0			0			0			0	
Mixed (E-waste					- 1			2612417				
collection program)		1,067			0			1,067			0	
Wood		0			0			0			0	
Avoidable Food Waste		0			0			0			0	
Coffee Grinds		18,290			0			0			18,290	
Coffee Beverage Cups		3,913			0			2,247			1,666	
Liquids -												
food/beverage		12,038			0			2,838			9,200	
Napkins/Toweling												
(food related)		33,250			0			4,399			28,850	
Post Consumer Food			2	-	1							000000000000000000000000000000000000000
Waste	21,440	113,582	92,142	0	0	0	0	36,584	36,584	21,440	26,998	55,558
Tissue/Toweling												
(washroom related)	1,710	210	-1,500	0	0	0	0	39	39	1,710	170	-1,540
Clothes		0			0			0			0	
#6 PS - Expanded								12.8000049				
polystyrene		1,574			0			186			1,388	

		575			0			23			551	
Coffee Beverage Cups												
w/ lids		11,193			0			4,716			6,478	
Coffee Beverage Cups												
w/ lids and sleeves		5,466			0			2,242			3,223	
Coffee Beverage Cups												
w/sleeves		1,332			0			756			576	
Food packaging		15,651			0			3,445			12,206	
Lab Waste		5,505			0			9			5,499	
Laminated Paper												
Packaging		237			0			35			202	
LDPE/HDPE Film -												
Products (non-					_							
packaging)		4,484			0			454			4,030	
Maintenance Waste		1,114			0			20			1,064	
Masking Tape		1,220			0			29			1,191	
Office Waste		255			0			16			239	
Polycoat Beverage												
Cups		4,074			0			901			3,173	
Spiral Wound												
Containers		69			0			13			26	
Tissue/Toweling												
(cleaning related)		1,027			0			72			926	
Other Non-Recyclable												
Material	121,070			0	0	0	0			121,070		
FACILITY WIDE												
TOTALS	214,590	338,227	123,637	0	0	0 51	51,550	658'66	30,763	163,040	238,368	55,770
Percent Change (total												
C ÷ total A × 100 ) from Base Year:		57.62%			٠			%89'65			34.12%	

29.52%

Note: When completing this form, write "n/a" in the "Estimated Amount of Waste Produced" column where the entity will not produce any waste for a category of waste.

- Fill out these columns each year following the initial waste audit or baseline year to determine the progress that is being made by your waste reduction program.
  - Specific waste categories appearing in RED were ones employed during 2012 base audit

VI. Extent to Which Materials or Products Used Or Sold By the Entity Consist of Recycled or Reused Materials or Products (Davis)

Plea	se answer the following questions (and please attach any additional page(s) as required):
1.	Do you have a management policy in place that promotes the purchasing and/or use of materials or products that consist of recycled and/or reused materials or products? If yes, please describe.
	Sheridan's Sustainability Policy outlines one of its principles that is based on a model called The Natural Step as follows: "We must eliminate our contributions to the systematic physical degradation of nature and natural processes (e.g. overharvesting forests, destroying habitat and overfishing)".
	In the Request of Proposal documents, the contractors are required to outline how they demonstrate sustainability in their project proposals.
2.	Do you have plans to increase the extent to which materials or products used or sold* consist of recycled or reused materials or products? If yes, please describe.  * Information regarding materials or products "sold" that consist of recycled or reused materials or products is only required from owner(s) of retail shopping establishments and the owner(s) or operator(s) of large manufacturing establishments.
	It is in Sheridan College's long term plan.
	eby certify that the information provided in this Report of Waste Audit is complete and correct.

Signature of authorized official:

Planning, faculities & June 16, 2015
sustainassity

# MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE REDUCTION WORK PLAN (DAVIS)

Industrial, Commercial and Institutional Establishments As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request.

### I. General Information (Davis)

Name of Owner and/or Operator of I Sheridan College Institute of Technol	시	*
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Davis Campus of Sheridan College	,	
Municipality: Brampton, ON Canada		
Type of entity Educational Institution		

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

### II.Description of Entity (Davis)

### Provide a brief overview of the entity(ties):

Davis Campus is a college campus managed by Sheridan College in Brampton, Ontario. The campus has a total of four buildings covering 647,888 square feet. There are 12,024 students attending this campus with 1,393 staff.

This waste audit was conducted in April 2015 at this Sheridan College Campus. The Zero Waste streams which include mixed recycling, organics and waste-to-landfill were audited for the purpose of identifying current diversion rates by specific waste category and to calculate contamination rates. A 24 hour sample of organics, mixed recycling and waste-to-landfill was sorted and weighed in each of the 20 areas audited. Weight based generation information from 2014 for the waste and diversion programs were obtained from the service provider(s) and were used in the calculation of diversion rates.

At the time of the audit, the campus had fully implemented the following collection programs:

- 1. Mixed Recycling (co-mingle including glass, metal, paper, plastic, paper)
- 2. Organics
- 3. Waste to Landfill
- 4. Bulk old corrugated cardboard (OCC) Recycling
- 5. E-Waste Campus Program & E-Waste Day Event (combined in this report)

## III. Plans to Reduce, Reuse and Recycle Waste (Davis)

explain what your pla	waste described in Part V of "Report of a Waste Audit" (on which this plan is based), ans are to Reduce, Reuse and Recycle the waste, including: 1) how the waste will be the establishment, and 2) the programs to reduce, reuse and recycle all source
Waste Category (as stated in Part V of your "Report of a Waste Audit")	Source Separation and 3Rs Program
Example: fine paper (e.g. from an office)	"Fine Paper 3Rs Program"  Reduce: Staff will be encouraged to print on both sides of each sheet.  Reuse: Discarded paper with print only on one side will be used for note pads/scrap.  Recycle: Staff will be provided with instructions via email. Receptacles will be provided beside each desk. Staff will empty receptacles into centralized containers. Custodial staff will empty centralized containers into bulk container at loading dock for collection by recycling company.
#1 PET - clear thermoform packaging	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#1 PET - other thermoform (coloured)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#1 PET Bottles - excluding alcoholic beverage	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 HDPE Bottles and Jugs	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 Other HDPE Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#5 Other PP Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#6 PS - Non- expanded - all other #7 Other Plastics	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.  Staff/students will be encouraged to include material in the ZW mixed recycling
Aluminum Aerosol	bin through education/signage.
Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Foil & Foil Trays	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aseptic Containers - (excluding alcoholic beverages)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.

Aseptic Containers - alcoholic beverages	Little generated.
Boxboard / Cores	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Clear Alcoholic Beverage Glass	Little generated.
Clear Glass Other Beverage and Food	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Coloured Glass Other Beverage and Food	Little generated.
Gable Top Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Kraft Paper	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Large HDPE & PP Pails & Lids	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Milk Bladder	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Mixed Fine Paper	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Molded Pulp/Fibre	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Newspaper - Other	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Newspaper – Dailys and Weeklys	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Other Metal	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Other Paper (paper plates)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Rubber & Nitrile Gloves	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Steel Aerosol Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Steel Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Textiles	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Corrugated Cardboard	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Batteries	Most captured through E-recycling programs.
Computer Peripherals	Most captured through E-recycling programs.
Mixed (E-waste collection program)	Most captured through E-recycling programs.
Wood	Little to none generated.

Avoidable Food Waste	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Coffee Grinds	Staff/students will be encouraged to include material in the ZW organics bin
7,714,77,234,114,23	through education/signage.
Coffee Beverage	Staff/students will be encouraged to include material in the ZW organics bin
Cups	through education/signage.
Liquids -	Staff/students will be encouraged to empty then recycle containers
food/beverage	education/signage.
Napkins/Toweling	Staff/students will be encouraged to include material in the ZW organics bin
(food related)	through education/signage.
Post Consumer	Staff/students will be encouraged to include material in the ZW organics bin
Food Waste	through education/signage.
Tissue/Toweling	Little generated since implemented a program of switching over to hand dryers in
(washroom related)	washrooms.
Clothes	Little generated.
#6 PS - Expanded	Little generated.
polystyrene	
Coffee pods	Little generated.
Coffee Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups w/ lids	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
200	organics and does not accept any cups with lids/sleeves.
Coffee Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups w/ lids and	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
sleeves	organics and does not accept any cups with lids/sleeves.
Coffee Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups w/sleeves	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
	organics and does not accept any cups with lids/sleeves.
Food packaging	Little generated.
Lab Waste	Little generated.
Laminated Paper	Little generated.
Packaging	In that is Manager and it
LDPE/HDPE Film -	Little generated.
Products (non-	
packaging)	
Maintenance Waste	Little generated.
Masking Tape	Little generated.
Office Waste	Little generated.
Polycoat Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
	organics and does not accept any cups with lids/sleeves.
Spiral Wound	Little generated.
Containers	
Tissue/Toweling	Little generated.
(cleaning related)	
Other Non-	Little generated.
Recyclable Material	The state of the s

### IV. Responsibility for Implementing The Waste Reduction Work Plan (Davis)

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity(ies). If more than one person is responsible for implementation, identify each person who is responsible and indicate the part of the Waste Reduction Work Plan that each person is responsible for implementing.

Name of Person

Responsibility

Telephone #

Name of Person	Responsibility	Telephone #
Wai Chu Cheng	Promoting, developing and implementing the Zero Waste program, tracking and assessing of data and evaluating the program.	905-845-9430 x 5423
Herbert Sinnock	Developing and evaluating the Zero Waste program	905-875-4405
James Fletcher	Evaluating the Zero Waste program	905-845-9430 x2156

## V. Timetable for Implementing Waste Reduction Work Plan (Davis)

Source Separation and 3Rs Program	Schedule for Completion					
Example: Fine Paper 3Rs Program	"Desk side receptacles and centralized containers to be purchased in March.  New collection contract for recycling to be arranged for April Kick off for program and instructions to staff regarding 3Rs program to occur in April" OR "3Rs Program currently in place."					
1. Enhancing organic recovery	Encouraging the emptying of food waste and napkins in the organics bin, then the disposal of the food packaging in the appropriate ZW recycling or ZW organics bin through education/signage. For example, utilize new student packages, environmental and zero waste pledges, student run zero waste events and sorting challenges.  Effectiveness: Improve capture rate for organics by 20%  Due date: 2015/2016					
2. Enhancing mixed recycling recovery	Encouraging the proper disposal in mixed recycling with particular focus on capturing mixed fine paper, boxboard/cores, polypropylene, polystyrene, PET bottles and cardboard through more education/bigger signage. For example, utilize new student packages, environmental and zero waste pledges, student run zero waste events and sorting challenges.  Effectiveness: Improve capture rate for each mixed recyclable by 20%.  Due date: 2015/2016					
3. Coffee Cup Management	i) Encouraging removal of lids and sleeves from coffee cups prior to placement in ZW organics bin through education/signage. Coffee beverage cups are only suitable for the ZW organics program when the lids and sleeves are removed, otherwise they are waste to landfill.  Effectiveness: Improve capture rate of coffee cups in organics program by 25%  Due date: 2015/2016					
	OR  ii) Explore the option of switching to a system/supplier that accepts polycoat and non-polycoat coffee cups in whole/part with and without lids/sleeves to					

	streamline the diversion of these items through a single stream recycling program instead of organics program.  Effectiveness: Improve capture of coffee cups by 50%. Additionally capture 50% of non-polycoat beverage cups that presently go as waste to landfill Due date: 2015/2016
4. Encouraging Emptying of Beverage Containers	Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable.  Effectiveness: Reduce disposal of beverage liquids by 40%  Due date: 2015/2016
5. Capturing & Reporting Material Weights for All Diversion Programs at the Campus	There are several additional diversion programs in place at the Davis Campus but the weight-based data is not currently captured for reporting purposes. Sheridan should conduct an inventory of all diversion programs in place at each of the campuses and develop procedures to collect, monitor and report on these programs.  Effectiveness: Effect on diversion rate likely significant but not quantifiable  Due date: 2015/2016

### VI. Communication to Staff, Customers, Guests and Visitors (Davis)

Explain how the Waste Reduction Work Plan will be communicated to employees, customers, tenants, guests/visitors and students:

The Waste Reduction Plan will be posted on the Sheridan Sustainability website. Comprehensive strategies will be adopted in promoting the Zero Waste program, including the weekly e-newsletter Insider, Sustainability website, campus TV screens, campus newspaper, Sheridan social media and the Zero Waste promotion booths across all campuses. These media as well as promotional material and additional signage will be employed, where practicable, to promote the implementation of each of the individual waste reduction work plans.

### VII. Estimated Waste Produced By Material Type And The Projected Amount (Davis)

	Estimated Annual Waste Produced * (kg)	Annual Amount Currently Diverted (2015) (kg)	Name of Proposed 3Rs Program (as stated in Part III)	Projectio Reduce, I Waste (kg)		irther r Recycle	Estimated Annual Amount to be Diverted ** (%)
				Reduce	Re- use	Recycle	
#1 PET - clear thermoform packaging	773	294	Enhancing Mixed Recycling	0	0	96	50.4%
#1 PET - other thermoform (coloured)	113	40	Enhancing Mixed Recycling	0	0	15	48.5%
#1 PET Bottles - excluding alcoholic beverage	7,357	3,661	Enhancing Mixed Recycling	0	0	739	59.8%
#2 HDPE Bottles and Jugs	382	118	Enhancing Mixed Recycling	0	0	53	44.8%
#2 Other HDPE Containers	14	14	Enhancing Mixed Recycling	0	0	0	100.0%
#5 Other PP Containers	570	147	Enhancing Mixed Recycling	0	0	85	40.7%

#6 PS - Non- expanded - all other	16,107	4,708	Enhancing Mixed Recycling	0	0	2,280	43.4%
#7 Other Plastics	784	61	Enhancing Mixed Recycling	0	0	145	26.2%
Aluminum Aerosol Containers	0	0	Enhancing Mixed Recycling	0	0	0	
Aluminum Foil & Foil Trays	0	0	Enhancing Mixed Recycling	0	0	0	
Aluminum Food & Other Beverage Cans	4,153	954	Enhancing Mixed Recycling	0	0	640	38.4%
Aseptic Containers - (excluding alcoholic beverages)	1,028	452	Enhancing Mixed Recycling	0	0	115	55.2%
Aseptic Containers - alcoholic beverages	9	9	Enhancing Mixed Recycling	0	0	0	100.0%
Boxboard / Cores	11,690	3,239	Enhancing Mixed Recycling	0	0	1,690	42.2%
Clear Alcoholic Beverage Glass	467	0	Enhancing Mixed Recycling	0	0	93	20.0%
Clear Glass Other Beverage and Food	1,601	726	Enhancing Mixed Recycling	0	0	175	56.3%
Coloured Glass Other Beverage and Food	85	85	Enhancing Mixed Recycling	0	0	o	100.0%
Gable Top Containers	2,832	759	Enhancing Mixed Recycling	0	0	415	41.4%
Kraft Paper	3,984	1,369	Enhancing Mixed Recycling	0	0	523	47.5%

Large HDPE & PP Pails & Lids	349	349	Enhancing Mixed Recycling	0	0	0	100.0%
Milk Bladder	542	0	Enhancing Mixed Recycling	0	0	108	20.0%
Mixed Fine Paper	24,881	7,021	Enhancing Mixed Recycling	0	0	3,572	42.6%
Molded Pulp/Fibre	1,943	672	Enhancing Mixed Recycling	0	0	254	47.7%
Newspaper - Other	258	0	Enhancing Mixed Recycling	0	0	52	20.0%
Newspaper – Dailys and Weeklys	343	57	Enhancing Mixed Recycling	0	0	57	33.2%
Other Metal	0	0	Enhancing Mixed Recycling	0	0	0	
Other Paper (paper plates)	1,448	302	Enhancing Mixed Recycling	0	0	229	36.7%
Rubber & Nitrile Gloves	1,483	58	Enhancing Mixed Recycling	0	0	285	23.1%
Steel Aerosol Cans	0	0	Enhancing Mixed Recycling	0	0	0	
Steel Food & Other Beverage Cans	651	103	Enhancing Mixed Recycling	0	0	110	32.6%
Textiles	386	0	Enhancing Mixed Recycling	0	0	77	20.0%
Corrugated Cardboard	17,861	14,540	Enhancing Mixed Recycling	0	0	664	85.1%
Batteries	5	5		0	0	0	100.0%
Computer Peripherals	0	0		0	0	0	
Mixed (E- waste collection program)	1,067	1,067		0	0	0	100.0%
Wood	0	0		0	0	0	
Avoidable Food Waste	0	0	Enhancing Organic Recovery	0	0	0	
Coffee Grinds	18,290	0	Enhancing Organic Recovery	0	0	3,658	20.0%

Coffee Polycoat Beverage Cups	3,913	2,247	Coffee Cup Management (Option ii: switch system)	0	0	833	78.7%
Liquids - food/bevera ge	12,038	2,838	Emptying Beverage Containers	0	0	3,680	54.1%
Napkins/Tow eling (food related)	33,250	4,399	Enhancing Organic Recovery	0	0	5,770	30.6%
Post Consumer Food Waste	113,582	36,584	Enhancing Organic Recovery	0	0	15,400	45.8%
Tissue/Towel ing (washroom related)	210	39	Enhancing Organic Recovery	0	0	34	34.9%
Clothes	0	0		0	0	0	
#6 PS - Expanded polystyrene	1,574	186***		0	0	0	
Coffee pods	575	23***		0	0	0	
Coffee Polycoat Beverage Cups w/ lids	11,193	4,716***	Coffee Cup Management (Option ii: switch system)	0	0	3,239	71.1%
Coffee Polycoat Beverage Cups w/ lids and sleeves	5,466	2,242***	Coffee Cup Management (Option ii: switch system)	0	0	1,612	70.5%
Coffee Polycoat Beverage Cups w/sleeves	1,332	756***	Coffee Cup Management (Option ii: switch system)	0	0	288	78.4%
Food packaging	15,651	3,445***		0	0	0	
Lab Waste	5,505	6***		0	0	0	
Laminated Paper Packaging	237	35***		0	0	0	
LDPE/HDPE Film - Products	4,484	454***		0	0	0	

(non- packaging)							
Maintenance Waste	1,114	50***		0	0	0	
Masking Tape	1,220	29***		0	0	0	
Office Waste	255	16***		0	0	0	
Polycoat Beverage Cups	4,074	901***	Coffee Cup Management (Option ii: switch system)	0	0	1,587	61.1%
Spiral Wound Containers	69	13***		0	0	0	
Tissue/Towel ing (cleaning related)	1,027	72***		0	0	0	
Other Non- Recyclable Material	0	0		0	0	0	
FACILITY WIDE TOTALS	338,227	99,859		0	0	48,573	43.9%

<sup>\*</sup> Estimated Waste Produced = Waste Diverted (3Rs) + Waste Disposed

I hereby certify that the information	on provided in this Waste Reduction Work Plan is complete and correct.
Signature of authorized official:	Planning, facilities & June 16, 2015 Sustainability

<sup>\*\*</sup> Estimated Waste Diversion Rate = Amount of Waste Diverted (3Rs) ÷ Estimated Waste Produced x 100%

<sup>\*\*\*</sup> Waste to Landfill material that is being diverted as a contaminant in ZW organics and/or mixed recycling

### MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE AUDIT (TRAFALGAR)

Industrial, Commercial and Institutional Establishments As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request. For large construction and demolition projects, please refer to the forms included with "A Guide to Waste Audits and Waste Reduction Work Plans for Construction and Demolition Projects as Required Under Ontario Regulation 102/94" (revised July 2008).

I. General Information (Trafalgar)

Name of Owner and/or Operator of I Sheridan College Institute of Technol	그는 아이들이 살아보는 아이들이 있는 아이들이 아이들이 아이들이 살아가는 아이들이 살아보다.	•
Name of Contact Person: Wai Chu Cheng	Telephone #: 905 845 9430	Email address: Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies): Trafalgar Campus of Sheridan College	2	
Municipality: Oakville, ON Canada		
Type of entity Educational Institution		

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

### II.Description of Entity (Trafalgar)

#### Provide a brief overview of the entity(ties):

The Trafalgar campus has twenty buildings with a total floor area of approximately 1,055,000 sq. ft.

This includes classrooms, studios, offices, cafeteria, washrooms, hallways, athletics centre, residences, etc.

There are 2,210 staff and 8,009 students.

Eleven of the buildings in the main campus are multi-storied including both offices and classrooms/studios. Some of the office areas include kitchettes and some only have microwave ovens on counters.

The cafeteria is located adjacent to B wing and has a full kitchen and a sit-down area in two levels for patrons. It provides food in disposable containers with single-use cutlery, for both sit-down and take-out meals. Food services outlets include Tim Hortons and Subway Sandwich. Three other coffee outlets are located in different areas.

Because the Trafalgar and Davis campuses are of similar size, have similar functional areas including classrooms, offices, hallways, washrooms, have the same ZW bin program in place and because historical evidence suggest the material generation and disposal practices at the two campuses will be similar, the material breakdown data from the waste audit at the 2015 waste audit at Davis Campus was used in conjunction with the annual waste generation data provided by the service providers for Trafalgar. In this way the 2015 Trafalgar Campus waste audit reported here is an amalgamation of 2014 weight-based information by stream for the Trafalgar campus and the relative proportion by weight of the mixed waste ZW stream from the Davis Campus 2015 audit.

At the time of the audit, the campus had fully implemented the following collection programs:

- 1. Mixed Recycling (co-mingle including glass, metal, paper, plastic, paper)
- 2. Organics
- 3. Waste to Landfill
- 4. Bulk old corrugated cardboard (OCC) Recycling
- 5. Wood Recycling
- 6. E-Waste Campus Program & E-Waste Day Event (combined in this report)
- 7. Clothes Reuse Event

# III. How Waste is Produced And Decisions Affecting the Production of Waste (Trafalgar)

how management decisions and policies will affe	ne entity(ies), explain how the waste will be produced and ect the production of waste.
Categories of Waste	How Is the Waste Produced and What Management Decisions/Policies Affect Its Production?
Example: Disposable Food Packaging	Generated by customers eating inside restaurant. Food packaging is used for health reasons. Reusable mugs for customers consuming coffee/tea inside restaurant is being reviewed.
#1 PET - clear thermoform packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#1 PET - other thermoform (coloured)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#1 PET Bottles - excluding alcoholic beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students. ZW water bottle refill stations installed to reduce PET water bottle generation/disposal.
#2 HDPE Bottles and Jugs	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#2 Other HDPE Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#5 Other PP Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#6 PS - Non-expanded - all other	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
#7 Other Plastics	Minimal amounts generated on campus.
Aluminum Aerosol Containers	Minimal amounts generated on campus.
Aluminum Foil & Foil Trays	Minimal amounts generated on campus.
Aluminum Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Aseptic Containers - (excluding alcoholic beverages)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Aseptic Containers - alcoholic beverages	Not for sale on campus. If exist brought in by staff/students. Minimal amounts generated on campus.

Boxboard / Cores	Generated all over the campus as a packaging material for food products, office products and class material supplies.
Clear Alcoholic Beverage Glass	Minimal amounts generated on campus.
Clear Glass Other Beverage and Food	Minimal amounts generated on campus.
Coloured Glass Other Beverage and Food	Minimal amounts generated on campus.
Gable Top Containers	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Kraft Paper	Paper products generated through campus activities.  Most generated in printing and photocopying areas.
Large HDPE & PP Pails & Lids	Minimal amounts generated on campus.
Milk Bladder	Minimal amounts generated on campus.
Mixed Fine Paper	Paper products generated through campus activities.  Most generated in printing and photocopying areas.
Molded Pulp/Fibre	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Newspaper - Other	Available for sale at Campus. Most should be captured in the ZW mixed recycling.
Newspaper – Dailys and Weeklys	Available for sale at Campus. Most should be captured in the ZW mixed recycling.
Other Metal	Minimal amounts generated on campus.
Other Paper (paper plates)	Minimal amounts generated on campus.
Rubber & Nitrile Gloves	Minimal amounts generated on campus.
Steel Aerosol Cans	Minimal amounts generated on campus.
Steel Food & Other Beverage Cans	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Textiles	Minimal amounts generated in campus.
Corrugated Cardboard	Generated in receiving area through delivery. Almost all captured in bulk recycling program.
Batteries	Minimal amounts generated in campus.
Computer Peripherals	Minimal amounts generated in campus.
Mixed (E-waste collection program)	Generated throughout campus.
Wood	Generated in receiving area through delivery. Almost all captured in bulk recycling program.
Avoidable Food Waste	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee Grinds	Generated at coffee stations throughout the campus.
Coffee Beverage Cups	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students

Liquids - food/beverage	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Napkins/Toweling (food related)	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Post Consumer Food Waste	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Tissue/Toweling (washroom related)	Part of a program of being removed from washrooms.  Switching to hand dryers. Only minimal amounts generated (<.5% of total waste)
Clothes	Captured during the end of year residence clean out. Event based capture for reuse/donation program.
#6 PS - Expanded polystyrene	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee pods	Little generated at coffee stations around the campus.
Coffee Beverage Cups w/ lids	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee Beverage Cups w/ lids and sleeves	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Coffee Beverage Cups w/sleeves	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Food packaging	Food packaging, beverage containers and organic waste is available for sale at Campus cafeteria and is brought to campus by staff/faculty and students
Lab Waste	Generated all over the campus.
Laminated Paper Packaging	Minimal amounts generated on campus.
LDPE/HDPE Film - Products (non-packaging)	Generated all over the campus.
Maintenance Waste	Minimal amounts generated on campus.
Masking Tape	Minimal amounts generated on campus.
Office Waste	Minimal amounts generated on campus.
Polycoat Beverage Cups	Not available for sale on campus as not included in ZW recycling program. Likely brought in from off-site vendors by students/staff.
Spiral Wound Containers	Minimal amounts generated on campus.
Tissue/Toweling (cleaning related)	Minimal amounts generated on campus.
Other Non-Recyclable Material	Minimal amounts generated on campus.

Note: When completing this form, write "n/a" in the columns where the entity will not produce any waste for a category of waste.

### IV. Management of Waste (Trafalgar)

For each category of waste listed below, indicate which waste items will be disposed or reused/recycled and how each item will be managed at the entity(ies). Category Waste to be Disposed Reused or Recycled Waste Staff/clients may place in garbage Staff/clients place cans in recycling receptacles. Collection staff later bins collect cans. Those in garbage are Example: Beverage cans disposed; those in recycling receptacles are recycled. #1 PET - clear thermoform Should be included in ZW Recycling Bin Program though some may end packaging up in landfill #1 PET - other thermoform Should be included in ZW Recycling Bin Program though some may end (coloured) up in landfill Should be included in ZW Recycling #1 PET Bottles - excluding alcoholic beverage Bin Program though some may end up in landfill. Reduction in PET water bottles through installation of reusable water bottle filling stations. #2 HDPE Bottles and Jugs Should be included in ZW Recycling Bin Program though some may end up in landfill Should be included in ZW Recycling #2 Other HDPE Containers Bin Program though some may end up in landfill #5 Other PP Containers Should be included in ZW Recycling Bin Program though some may end up in landfill Should be included in ZW Recycling #6 PS - Non-expanded - all other Bin Program though some may end up in landfill #7 Other Plastics Should be included in ZW Recycling Bin Program though some may end up in landfill Should be included in ZW Recycling Aluminum Aerosol Containers Bin Program though some may end up in landfill Should be included in ZW Recycling Aluminum Foil & Foil Trays Bin Program though some may end up in landfill Aluminum Food & Other Beverage Should be included in ZW Recycling Bin Program though some may end Cans up in landfill

Aseptic Containers - (excluding alcoholic beverages)	Should be included in ZW Recycling Bin Program though some may end up in landfill
Aseptic Containers - alcoholic beverages	Should be included in ZW Recycling Bin Program though some may end up in landfill
Boxboard / Cores	Should be included in ZW Recycling Bin Program though some may end up in landfill
Clear Alcoholic Beverage Glass	Should be included in ZW Recycling Bin Program though some may end up in landfill
Clear Glass Other Beverage and Food	Should be included in ZW Recycling Bin Program though some may end up in landfill
Coloured Glass Other Beverage and Food	Should be included in ZW Recycling Bin Program though some may end up in landfill
Gable Top Containers	Should be included in ZW Recycling Bin Program though some may end up in landfill
Kraft Paper	Should be included in ZW Recycling Bin Program though some may end up in landfill
Large HDPE & PP Pails & Lids	Should be included in ZW Recycling Bin Program though some may end up in landfill
Milk Bladder	Should be included in ZW Recycling Bin Program though some may end up in landfill
Mixed Fine Paper	Should be included in ZW Recycling Bin Program though some may end up in landfill
Molded Pulp/Fibre	Should be included in ZW Recycling Bin Program though some may end up in landfill
Newspaper - Other	Should be included in ZW Recycling Bin Program though some may end up in landfill
Newspaper – Dailys and Weeklys	Should be included in ZW Recycling Bin Program though some may end up in landfill
Other Metal	Should be included in ZW Recycling Bin Program though some may end up in landfill

Other Paper (paper plates)	Should be included in ZW Recycling Bin Program though some may end up in landfill
Rubber & Nitrile Gloves	Should be included in ZW Recycling Bin Program though some may end up in landfill
Steel Aerosol Cans	Should be included in ZW Recycling Bin Program though some may end up in landfill
Steel Food & Other Beverage Cans	Should be included in ZW Recycling Bin Program though some may end up in landfill
Textiles	Should be included in ZW Recycling Bin Program though some may end up in landfill
Corrugated Cardboard	Should be included in Bulk OCC capture program in deliveries or ZW Recycling Bins throughout the campus, though some may end up in landfill
Batteries	Should be included in E-Recycling or captured during E-Recycling Events.
Computer Peripherals	Should be included in E-Recycling or captured during E-Recycling Events.
Mixed (E-waste collection program)	Should be included in E-Recycling or captured during E-Recycling Events.
Wood	Is captured by wood recycling program in deliveries.
Avoidable Food Waste	Should be included in ZW Organics Bin Program though much ends up in landfill
Coffee Grinds	Should be included in ZW Organics Bin Program though much ends up in landfill
Coffee Beverage Cups	Should be included in ZW Organics Bin Program though much ends up in landfill
Liquids - food/beverage	Should be included in ZW Organics Bin Program though much ends up in landfill
Napkins/Toweling (food related)	Should be included in ZW Organics Bin Program though much ends up in landfill
Post Consumer Food Waste	Should be included in ZW Organics Bin Program though much ends up in landfill

Tissue/Toweling (washroom	Part of a program to eliminate	
related)	paper towels in washrooms.	
	Switching to air hand dryers.	
Clothes		Student clothes captured for
		donation/reuse through end of year
		residence clean out event
#6 PS - Expanded polystyrene	Little generated and no diversion	
	program currently available.	
Coffee pods	Little generated and no diversion	
	program currently available.	
Coffee Beverage Cups w/ lids		Under current diversion program the lids and sleeves should be removed for ZW recycling and the cup for ZW organics. However much ends up being disposed.
Coffee Beverage Cups w/ lids and		Under current diversion program the
sleeves		lids and sleeves should be removed
		for ZW recycling and the cup for ZW
		organics. However much ends up
		being disposed.
Coffee Beverage Cups w/sleeves		Under current diversion program the
		lids and sleeves should be removed
		for ZW recycling and the cup for ZW
		organics. However much ends up
		being disposed.
Food packaging	Little generated and no diversion	
	program currently available.	
Lab Waste	Little generated and no diversion	
Harmonia de la composição	program currently available.	
Laminated Paper Packaging	Little generated and no diversion	
	program currently available.	
LDPE/HDPE Film - Products (non-	Little generated and no diversion	
packaging)	program currently available.	
Maintenance Waste	Little generated and no diversion	
	program currently available.	
Masking Tape	Little generated and no diversion	
9200	program currently available.	
Office Waste	Little generated and no diversion	
No. 41	program currently available.	
Polycoat Beverage Cups	Not included in current recycling	
	or organics program.	
Spiral Wound Containers	Little generated and no diversion	
	program currently available.	
Tissue/Toweling (cleaning related)	Little generated and no diversion	
	program currently available.	

Other Non-Recyclable Material	Little generated and no diversion
1 2 177.	program currently available.

Note: When completing this form, write "n/a" in the columns where the entity will not produce any waste for a category of waste.

PAGE 60 OF 77

Maste "A" Base "B" * Year Current 2012 Year (kg) (kg) (kg) 3.8t  a and 4t 3.8t  s (2012 42,690 1,693	"C" * Change (A-B) (kg) -10kg	Reused "A" Base	* "8"		Dogwood					
Waste "A" Base "B" * Year Current 2012 Year (kg) (kg) (kg) 90kg 90kg 90kg 90kg slastics 27,210 g) s (2012 42,690 1,693	3	"A" Base	"B" *	4 40 40 40	Recycled			Disposed		
d and (kg) (kg) (kg) (kg) (kg) (kg) (hg) (hg) (hg) (hg) (hg) (hg) (hg) (h	3	Base	1	<u>.</u>	"A"	"B" *	* "C".	"A" Base	"B" *	* ,','
d and (kg) 100kg 90kg 100kg 90kg 100kg 90kg 100kg 100k	(8)		Curr	Chang	Base	Current	Change	Year 2012	Current	Change
d and 100kg 90kg 100kg 1		Year	ent	e	Year	Year (kg)	(A-B)	(kg)	Year (kg)	(A-B)
d and 100kg 90kg 90kg 90kg 90kg 100kg 90kg 90kg 90kg 90kg 90kg 90kg 90kg		2012 (kg)	Year (kg)	(A-B) (kg)	2012 (kg)		(kg)		ŝ	(kg)
d and 4t 3.8t  plastics 27,210  s (2012 42,690 1,693		0	0	0	75kg	85kg +	10kg	25kg	Skg	- 20kg
olastics 27,210 s (2012 42,690 1,693										
olastics 27,210 s (2012 42,690 1,693										
olastics 27,210 g) s (2012 42,690		0	0	0	3.2t	3.4t	+.2t .	8t	.4t	4t
plastics 27,210 g) s (2012 42,690										
g) 27,210 s (2012 42,690					024.04			041		
s (2012 42,690					10,470			16,740		
42,030					000 30			010		
					20,320			0/5/0		
ackaging			0			883			809	
#1 PET - other										
thermoform 289			0			167			123	
(coloured)										
#1 PET Bottles -										
excluding alcoholic 16,696			0			10,451			6,245	
beverage						8				
#2 HDPE Bottles and			(			000			744	
Jugs			>			799			440	
#2 Other HDPE 16			0			16			0	

																	_	_
714	19,261	1,222	0	0	5,405	974	0	14,281	790	1,479	0	3,504	4,419	0	916	30,178	2,149	436
										2.65						8		
529	11,041	120	0	0	2,865	727	36	8,621	0	2,434	351	1,820	3,102	1,443	0	23,063	2,024	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1,243	30,301	1,342	0	0	8,270	1,701	36	22,901	790	3,912	351	5,324	7,521	1,443	916	53,241	4,173	436
#5 Other PP Containers	#6 PS - Non-expanded - all other	#7 Other Plastics	Aluminum Aerosol Containers	Aluminum Foil & Foil Trays	Aluminum Food & Other Beverage Cans	Aseptic Containers - (excluding alcoholic beverages)	Aseptic Containers - alcoholic beverages	Boxboard / Cores	Clear Alcoholic Beverage Glass	Clear Glass Other Beverage and Food	Coloured Glass Other Beverage and Food	Gable Top Containers	Kraft Paper	Large HDPE & PP Pails & Lids	Milk Bladder	Mixed Fine Paper	Molded Pulp/Fibre	Newspaper - Other

484	0	1,936	2,407	0	927	652	5,612	0	0			0	30,903	2,814	15,545	48,747	130,102	288	0	2,346
							20										32,150	3,910		
234	0	968	119	0	146	0	45,617	21	0	5,818	9,530	0	0	2,788	9,952	8,647	64,727	162	0	399
							000'89										0	160		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	275	0
							0										0	0		
719	0	2,832	7,527	0	1,073	652	51,229	21	0	5,818	9,530	0	30,903	5,602	25,497	57,394	194,830	450	275	2,745
							68,020										32,150	4,060		
Newspaper – Dailys and Weeklys	Other Metal	Other Paper (paper plates)	Rubber & Nitrile Gloves	Steel Aerosol Cans	Steel Food & Other Beverage Cans	Textiles	Corrugated Cardboard	Batteries	Computer Peripherals	Mixed (E-waste collection program)	Wood	Avoidable Food Waste	Coffee Grinds	Coffee Beverage Cups	Liquids - food/beverage	Napkins/Toweling (food related)	Post Consumer Food Waste	Tissue/Toweling (washroom related)	Clothes	#6 PS - Expanded polystyrene

Coffee pods		1,028			0			97			931	
Coffee Beverage Cups w/ lids		18,488			0			7,543			10,945	
Coffee Beverage Cups w/ lids and sleeves		9,246			0			3,800			5,447	
Coffee Beverage Cups w/sleeves		1,923			0			949			974	
Food packaging		27,663			0			7,039			20,625	
Lab Waste		9,317			0			25			9,292	
Laminated Paper Packaging		402			0			09			342	
LDPE/HDPE Film - Products (non- packaging)		8,391			0			1,582			6'809	
Maintenance Waste		1,998			0			199			1,798	
Masking Tape		2,132			0			119			2,013	
Office Waste		445			0			41			404	
Polycoat Beverage Cups		7,004			0			1,642			5,362	
Spiral Wound Containers		149			0			55	vi		94	
Tissue/Toweling (cleaning related)		1,911			0			296			1,615	
Other Non-Recyclable Material	155,420	0		0	0		0	0		155,420		
FACILITY WIDE TOTALS	329,550	726,623	397,073	0	275	275	114,950	323,858	208,908	214,610	402,765	188,155
Percent Change (total C + total A x 100 ) from Base Year:		120.49%						181.74%			87.67%	

2015 Current year	version Rate:
	44.57%

Note: When completing this form, write "n/a" in the "Estimated Amount of Waste Produced" column where the entity will not produce any waste for a category of waste.

- Fill out these columns each year following the initial waste audit or baseline year to determine the progress that is being made by your waste reduction program.
  - Specific waste categories appearing in RED were ones employed during 2012 base audit

VI. Extent to Which Materials or Products Used Or Sold By the Entity Consist of Recycled or Reused Materials or Products (Trafalgar)

1.	Do you have a management policy in place that promotes the purchasing and/or use of materials o products that consist of recycled and/or reused materials or products? If yes, please describe.
	Sheridan's Sustainability Policy outlines one of its principles that is based on a model called The Natural Step as follows: "We must eliminate our contributions to the systematic physical degradation of nature and natural processes (e.g. overharvesting forests, destroying habitat and overfishing)".
	In the Request of Proposal documents, the contractors are required to outline how they demonstrate sustainability in their project proposals.
	Do you have plans to increase the extent to which materials or products used or sold* consist of recycled or reused materials or products? If yes, please describe.  * Information regarding materials or products "sold" that consist of recycled or reused materials or products is only required from owner(s) of retail shopping establishments and the owner(s) or operator(s) of large manufacturing establishments.
	It is in Sheridan College's long term plan.
	ture of authorized official: Title: ASSCINTE VICE PARSIONAL Date:
/	Physics, fecilities & June 16, 2015

# MINISTRY OF THE ENVIRONMENT WASTE FORM: REPORT OF A WASTE REDUCTION WORK PLAN (TRAFALGAR)

Industrial, Commercial and Institutional Establishments
As required by O. Reg. 102/94

This report must be prepared 6 months after becoming subject to O. Reg. 102/94 and a copy retained on file for at least five years after it is prepared, and be made available to the ministry upon request.

#### I. General Information (Trafalgar)

Sheridan College Institute of Techno Name of Contact Person:	Telephone #:	Email address:
Wai Chu Cheng	905 845 9430	Waichu.cheng@sheridancollege.ca
Street Address(es) of Entity(ies):	Tu.	
Trafalgar Campus of Sheridan Collegi	e	
Municipality:		
Oakville, ON Canada		
Type of entity		
Educational Institution		

Note: O. Reg. 102/94 does not apply to multi-unit residential buildings.

### II.Description of Entity (Trafalgar)

#### Provide a brief overview of the entity(ties):

The Trafalgar campus has twenty buildings with a total floor area of approximately 1,055,000 sq. ft.

This includes classrooms, studios, offices, cafeteria, washrooms, hallways, athletics centre, residences, etc.

There are 2,210 staff and 8,009 students.

Because the Trafalgar and Davis campuses are of similar size, have similar functional areas including classrooms, offices, hallways, washrooms, have the same ZW bin program in place and because historical evidence suggest the material generation and disposal practices at the two campuses will be similar, the material breakdown data from the waste audit at the 2015 waste audit at Davis Campus was used in conjunction with the annual waste generation data provided by the service providers for Trafalgar. In this way the 2015 Trafalgar Campus waste audit reported here is an amalgamation of 2014 weight-based information by stream for the Trafalgar campus and the relative proportion by weight of the mixed waste ZW stream from the Davis Campus 2015 audit.

At the time of the audit, the campus had fully implemented the following collection programs:

- 1. Mixed Recycling (co-mingle including glass, metal, paper, plastic, paper)
- 2. Organics
- 3. Waste to Landfill
- 4. Bulk old corrugated cardboard (OCC) Recycling
- 5. Wood Recycling
- 6. E-Waste Campus Program & E-Waste Day Event (combined in this report)
- 7. Clothes Reuse Event

# III. Plans to Reduce, Reuse and Recycle Waste (Trafalgar)

explain what your pla	waste described in Part V of "Report of a Waste Audit" (on which this plan is based), ins are to Reduce, Reuse and Recycle the waste, including: 1) how the waste will be he establishment, and 2) the programs to reduce, reuse and recycle all source
Waste Category (as stated in Part V of your "Report of a Waste Audit")	Source Separation and 3Rs Program
Example:	"Fine Paper 3Rs Program"
fine paper (e.g. from an office)	Reduce: Staff will be encouraged to print on both sides of each sheet.  Reuse: Discarded paper with print only on one side will be used for note pads/scrap.  Recycle: Staff will be provided with instructions via email. Receptacles will be provided beside each desk. Staff will empty receptacles into centralized containers. Custodial staff will empty centralized containers into bulk container at loading dock for collection by recycling company.
#1 PET - clear thermoform packaging	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#1 PET - other thermoform (coloured)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#1 PET Bottles - excluding alcoholic beverage	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 HDPE Bottles and Jugs	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#2 Other HDPE Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#5 Other PP Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
#6 PS - Non- expanded - all other	
#7 Other Plastics	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Aerosol Containers	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Foil & Foil Trays	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aluminum Food & Other Beverage Cans	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.
Aseptic Containers - (excluding alcoholic beverages)	Staff/students will be encouraged to include material in the ZW mixed recycling bin through education/signage.

Aseptic Containers - alcoholic beverages	Little generated.
Boxboard / Cores	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Clear Alcoholic	Little generated.
Beverage Glass	THE PROPERTY OF A PROPERTY OF THE PROPERTY OF
Clear Glass Other	Staff/students will be encouraged to include material in the ZW mixed recycling
Beverage and Food	bin through education/signage.
Coloured Glass	Little generated.
Other Beverage and	
Food	
Gable Top	Staff/students will be encouraged to include material in the ZW mixed recycling
Containers	bin through education/signage.
Kraft Paper	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Large HDPE & PP	Staff/students will be encouraged to include material in the ZW mixed recycling
Pails & Lids	bin through education/signage.
Milk Bladder	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Mixed Fine Paper	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Molded Pulp/Fibre	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Newspaper - Other	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Newspaper – Dailys	Staff/students will be encouraged to include material in the ZW mixed recycling
and Weeklys	bin through education/signage.
Other Metal	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Other Paper (paper	Staff/students will be encouraged to include material in the ZW mixed recycling
plates)	bin through education/signage.
Rubber & Nitrile	Staff/students will be encouraged to include material in the ZW mixed recycling
Gloves	bin through education/signage.
Steel Aerosol Cans	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Steel Food & Other	Staff/students will be encouraged to include material in the ZW mixed recycling
Beverage Cans	bin through education/signage.
Textiles	Staff/students will be encouraged to include material in the ZW mixed recycling
	bin through education/signage.
Corrugated	Staff/students will be encouraged to include material in the ZW mixed recycling
Cardboard	bin through education/signage.
Batteries	Most captured through E-recycling programs.
Computer Peripherals	Most captured through E-recycling programs.
Mixed (E-waste collection program)	Most captured through E-recycling programs.
Wood	Most captured through wood recycling program.

Avoidable Food	Staff/students will be encouraged to include material in the ZW organics bin
Waste	through education/signage.
Coffee Grinds	Staff/students will be encouraged to include material in the ZW organics bin through education/signage.
Coffee Beverage	Staff/students will be encouraged to include material in the ZW organics bin
Cups	through education/signage.
Liquids -	Staff/students will be encouraged to empty then recycle containers
food/beverage	education/signage.
Napkins/Toweling	Staff/students will be encouraged to include material in the ZW organics bin
(food related)	through education/signage.
Post Consumer	Staff/students will be encouraged to include material in the ZW organics bin
Food Waste	through education/signage.
Tissue/Toweling	Little generated since commenced implementing a program to replace paper
(washroom related)	towels with hand towels in washrooms
Clothes	Little to none disposed. Captured for donation/reuse in end of year residence
	clean out event.
#6 PS - Expanded	Little generated.
polystyrene	
Coffee pods	Little generated.
Coffee Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups w/ lids	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
	organics and does not accept any cups with lids/sleeves.
Coffee Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups w/ lids and	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
sleeves	organics and does not accept any cups with lids/sleeves.
Coffee Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups w/sleeves	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
	organics and does not accept any cups with lids/sleeves.
Food packaging	Little generated.
Lab Waste	Little generated.
Laminated Paper	Little generated.
Packaging	Little Benerated.
LDPE/HDPE Film -	Little generated.
Products (non-	Little generated.
packaging)	
Maintenance Waste	Little generated.
	Little generated.
Masking Tape Office Waste	The second of th
	Little generated.
Polycoat Beverage	Switch to recycling program which includes polycoat and non-polycoat coffee
Cups	cups, lids and sleeves. Current program includes only non-polycoat coffee cups in
c : 1141 - 1	organics and does not accept any cups with lids/sleeves.
Spiral Wound	Little generated.
Containers	No. Performed and and
Tissue/Toweling	Little generated.
(cleaning related)	
Other Non-	Little generated.
Recyclable Material	

### IV. Responsibility for Implementing the Waste Reduction Work Plan (Trafalgar)

Identify who is responsible for implementing the Waste Reduction Work Plan at your entity(ies). If more than one person is responsible for implementation, identify each person who is responsible and indicate the part of the Waste Reduction Work Plan that each person is responsible for implementing.

Name of Person	Responsibility	Telephone #
Wai Chu Cheng	Promoting, developing and implementing the Zero Waste program, tracking and assessing of data and evaluating the program.	905-845-9430 x 5423
Herbert Sinnock	Developing and evaluating the Zero Waste program	905-875-4405
James Fletcher	Evaluating the Zero Waste program	905-845-9430 x2156

# V. Timetable for Implementing Waste Reduction Work Plan (Trafalgar)

Work Plan will be implem Source Separation and				
3Rs Program	Schedule for Completion			
Example: Fine Paper 3Rs Program	"Desk side receptacles and centralized containers to be purchased in March.  New collection contract for recycling to be arranged for April Kick off for program and instructions to staff regarding 3Rs program to occur in April" OR "3Rs Program currently in place."			
1. Enhancing organic recovery	Encouraging the emptying of food waste and napkins in the organics bin, then the disposal of the food packaging in the appropriate ZW recycling or ZW organics bin through education/signage. For example, utilize new student packages, environmental and zero waste pledges, student run zero waste events and sorting challenges.  Effectiveness: Improve capture rate for organics by 20%			
	Due date: 2015/2016			
2. Enhancing mixed recycling recovery	Encouraging the proper disposal in mixed recycling with particular focus on capturing mixed fine paper, boxboard/cores, polypropylene, polystyrene, PET bottles and cardboard through more education/bigger signage. For example, utilize new student packages, environmental and zero waste pledges, student run zero waste events and sorting challenges.  Effectiveness: Improve capture rate for each mixed recyclable by 20%			
	Effectiveness: Improve capture rate for each mixed recyclable by 20%  Due date: 2015/2016			
3. Coffee Cup Management	i) Encouraging removal of lids and sleeves from coffee cups prior to placemen in ZW organics bin through education/signage. Coffee beverage cups are only suitable for the ZW organics program when the lids and sleeves are removed, otherwise they are waste to landfill.			
	Effectiveness: Improve capture rate of coffee cups in organics program by 25%			
	Due date: 2015/2016			
	OR			
	ii) Explore the option of switching to a system/supplier that accepts polycoat and non-polycoat coffee cups in whole/part with and without lids/sleeves to streamline the diversion of these items through a single stream recycling program instead of organics program.			

	Effectiveness: Improve capture of coffee cups by 50%. Additionally capture 50% of non-polycoat beverage cups that presently go as waste to landfill.  Due date: 2015/2016
Encouraging     Emptying of Beverage     Containers	Encouraging the emptying of beverage containers prior to placement in mixed recycling through a combination of education/signage and placement of emptying stations where practicable.  Effectiveness: Reduce disposal of beverage liquids by 40%
	Due date: 2015/2016
5. Capturing & Reporting Material Weights for All Diversion Programs at the Campus	There are several additional diversion programs in place at the Trafalgar Campus but the weight-based data is not currently captured for reporting purposes. Sheridan should conduct an inventory of all diversion programs in place at each of the campuses and develop procedures to collect, monitor and report on these programs.
	Effectiveness: Effect on diversion rate likely significant but not quantifiable  Due date: 2015/2016

### VI. Communication to Staff, Customers, Guests and Visitors (Trafalgar)

Explain how the Waste Reduction Work Plan will be communicated to employees, customers, tenants, guests/visitors and students:

The Waste Reduction Plan will be posted on the Sheridan Sustainability website. Comprehensive strategies will be adopted in promoting the Zero Waste program, including the weekly e-newsletter Insider, Sustainability website, campus TV screens, campus newspaper, Sheridan social media and the Zero Waste promotion booths across all campuses. These media as well as promotional material and additional signage will be employed, where practicable, to promote the implementation of each of the individual waste reduction work plans.

### VII. Estimated Waste Produced By Material Type And The Projected Amount (Trafalgar)

	Estimated Annual Waste Produced * (kg)	Annual Amount Currently Diverted (2015) (kg)	Name of Proposed 3Rs Program (as stated in Part III)	Projectio Reduce, I Waste (kg)		irther r Recycle	Estimated Annual Amount to be Diverted **
				Reduce	Re- use	Recycle	
#1 PET - clear thermoform packaging	1,693	883	Enhancing Mixed Recycling	0	0	162	61.7%
#1 PET - other thermoform (coloured)	289	167	Enhancing Mixed Recycling	0	0	25	66.0%
#1 PET Bottles - excluding alcoholic beverage	16,696	10,451	Enhancing Mixed Recycling	0	0	1,249	70.1%
#2 HDPE Bottles and Jugs	733	288	Enhancing Mixed Recycling	0	0	89	51.4%
#2 Other HDPE Containers	16	16	Enhancing Mixed Recycling	0	0	0	100.0%
#5 Other PP Containers	1,243	529	Enhancing Mixed Recycling	0	0	143	54.0%

#6 PS - Non- expanded - all other	30,301	11,041	Enhancing Mixed Recycling	0	0	3,852	49.1%
#7 Other Plastics	1,342	120	Enhancing Mixed Recycling	0	0	244	27.2%
Aluminum Aerosol Containers	0	0	Enhancing Mixed Recycling	0	0	0	
Aluminum Foil & Foil Trays	0	0	Enhancing Mixed Recycling	0	0	0	
Aluminum Food & Other Beverage Cans	8,270	2,865	Enhancing Mixed Recycling	0	0	1,081	47.7%
Aseptic Containers - (excluding alcoholic beverages)	1,701	727	Enhancing Mixed Recycling	0	0	195	54.2%
Aseptic Containers - alcoholic beverages	36	36	Enhancing Mixed Recycling	0	0	0	100.0%
Boxboard / Cores	22,901	8,621	Enhancing Mixed Recycling	0	0	2,856	50.1%
Clear Alcoholic Beverage Glass	790	0	Enhancing Mixed Recycling	0	0	158	20.0%
Clear Glass Other Beverage and Food	3,912	2,434	Enhancing Mixed Recycling	0	0	296	69.8%
Coloured Glass Other Beverage and Food	351	351	Enhancing Mixed Recycling	0	0	0	100.0%
Gable Top Containers	5,324	1,820	Enhancing Mixed Recycling	0	0	701	47.3%
Kraft Paper	7,521	3,102	Enhancing Mixed Recycling	0	0	884	53.0%

Large HDPE & PP Pails & Lids	1,443	1,443	Enhancing Mixed Recycling	0	0	0	100.0%
Milk Bladder	916	0	Enhancing Mixed Recycling	0	0	183	20.0%
Mixed Fine Paper	53,241	23,063	Enhancing Mixed Recycling	0	0	6,036	54.7%
Molded Pulp/Fibre	4,173	2,024	Enhancing Mixed Recycling	0	0	430	58.8%
Newspaper - Other	436	0	Enhancing Mixed Recycling	0	0	87	20.0%
Newspaper – Dailys and Weeklys	719	234	Enhancing Mixed Recycling	0	0	97	46.1%
Other Metal	0	0	Enhancing Mixed Recycling	0	0	0	
Other Paper (paper plates)	2,832	896	Enhancing Mixed Recycling	0	0	387	45.3%
Rubber & Nitrile Gloves	2,527	119	Enhancing Mixed Recycling	0	0	481	23.8%
Steel Aerosol Cans	0	0	Enhancing Mixed Recycling	0	0	0	
Steel Food & Other Beverage Cans	1,073	146	Enhancing Mixed Recycling	0	0	185	30.9%
Textiles	652	0	Enhancing Mixed Recycling	0	0	130	20.0%
Corrugated Cardboard	51,229	45,617	Enhancing Mixed Recycling	0	0	1,122	91.2%
Batteries	21	21		0	0	0	100.0%
Computer Peripherals	0	0		0	0	0	
Mixed (E- waste collection program)	5,818	5,818		0	0	0	100.0%
Wood	9,530	9,530		0	0	0	100.0%
Avoidable Food Waste	0	0	Enhancing Organic Recovery	0	0	0	
Coffee Grinds	30,903	0	Enhancing Organic Recovery	0	0	6,181	20.0%

Coffee Polycoat Beverage	5,602	2,788	Coffee Cup Management (Option	0	0	1,407	74.9%
Cups			ii: switch system)				
Liquids - food/bevera ge	25,497	9,952	Emptying Beverage Containers	0	0	6,218	63.4%
Napkins/Tow eling (food related)	57,394	8,647	Enhancing Organic Recovery	0	0	9,749	32.1%
Post Consumer Food Waste	194,830	64,727	Enhancing Organic Recovery	0	0	26,020	46.6%
Tissue/Towel ing (washroom related)	450	162	Enhancing Organic Recovery	0	0	58	48.8%
Clothes	275	275		0	0	0	100.0%
#6 PS - Expanded polystyrene	2,745	399***		0	0		
Coffee pods	1,028	97***		0	0		
Coffee Polycoat Beverage Cups w/ lids	18,488	7,543***	Coffee Cup Management (Option ii: switch system)	0	0	5,473	70.4%
Coffee Polycoat Beverage Cups w/ lids and sleeves	9,246	3,800***	Coffee Cup Management (Option ii: switch system)	0	0	2,723	70.5%
Coffee Polycoat Beverage Cups w/sleeves	1,923	949***	Coffee Cup Management (Option ii: switch system)	0	0	487	74.7%
Food packaging	27,663	7,039***		0	0	0	
Lab Waste	9,317	25***		0	0	0	
Laminated Paper Packaging	402	60***		0	0	0	
LDPE/HDPE Film - Products	8,391	1,582***		0	0	0	

	9		

(non- packaging)						
Maintenance Waste	1,998	199***	0	0	0	
Masking Tape	2,132	119***	0	0	0	
Office Waste	445	41***	0	0	0	
Polycoat Beverage Cups	7,004	1,642***	0	0	0	
Spiral Wound Containers	149	55***	0	0	0	
Tissue/Towel ing (cleaning related)	1,911	296***	o	0	0	
Other Non- Recyclable Material	0	0	0	0	0	
FACILITY WIDE TOTALS	645,522	242,759	0	0	79,390	49.90%

<sup>\*</sup> Estimated Waste Produced = Waste Diverted (3Rs) + Waste Disposed

Signature of authorized official:	Planning, tailities & June 16, 2015
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<sup>\*\*</sup> Estimated Waste Diversion Rate = Amount of Waste Diverted (3Rs) ÷ Estimated Waste Produced x 100%

<sup>\*\*\*</sup> Waste to Landfill material that is being diverted as a contaminant in ZW organics and/or mixed recycling

I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct.