2016-2017 REPORT OF WASTE REDUCTION WORK PLAN - GENERAL INFORMATION

| Name of Owner and/or Operator of Entity(ies) and Company Name: Queen's University | | | | | |
|---|------------------------------------|-----------------------------------|--|--|--|
| Name of Contact Person: | Telephone #: | Email address: | | | |
| Llynwen Osborne | (613) 533-3396 | (613) 533-3396 Irao@queensu.ca | | | |
| Street Address(es) of Entity(ies): 207 Stuart Street | | | | | |
| Municipality: Kingston, ON | | | | | |
| Type of Entity (Check one) | | | | | |
| Retail Shopping Establishments | Hotels and Motels | | | | |
| Retail Shopping Complexes Hospitals | | | | | |
| Office Buildings | Educational Institu | Educational Institutions V | | | |
| Restaurants | Large Manufacturing Establishments | | | | |

DESCRIPTION OF ENTITY

Provide a brief overview of the entity(ties):

Queen's University is located in Kingston, Ontario.

The campus is comprised of several buildings including libraries, laboratories, residence buildings, cafeterias, classrooms, and athletic facilities. Queen's University has approximately 25,000 students, staff and faculty and generates approximately 3600 MT of waste and recyclables per year.

PLANS TO REDUCE, REUSE AND RECYCLE

For each category of waste described in Part V of "Report of a Waste Audit" (on which this plan is based), explain what your plans are to Reduce, Reuse and Recycle the waste, including: 1) how the waste will be source separated at the establishment, and 2) the programs to reduce, reuse and recycle all source separated waste.

| Waste Category | Source Separation and 3Rs Program |
|--------------------------|---|
| Mixed Fibre | Program already in place. Students, staff and faculty recycle mixed fibre materials in deskside and centralized receptacles. Receptacles are labeled clearly to ensure users are aware of what is accepted in the program and what is not. Fine Paper 3 Rs: Reduce: Employees/students are encouraged to send correspondence electronically, only print documents when necessary, print double-sided. Reuse: Employees/students are encouraged to use paper with only one sided printing for scrap/note paper. Recycle: Paper that cannot be reused is recycled in desk-side or centralized recycling containers. Custodial staff picks up the material and recycle it in exterior recycling containers for collection by the contracted recycling company. |
| Cans, Glass & Plastic | Program already in place. Students, staff and faculty recycle cans, glass and plastic materials in centralized receptacles. Receptacles are labeled clearly to ensure users are aware of what is accepted in the program and what is not. |
| Organics | Program already in place. The dining halls have been equipped with two ECorect machines : one in Ban Righ in 2009 and one in Leonard Hall in 2011. The material that comes out of the composter is put into organics collection toters and sent to a composting facility. The campus retail outlets also participate in the organics program in the front and back of house of their operations. This material is also sent to a composting facility. Campus departments are invited to join the campus organics program which focuses on capturing food waste generated by staff who bring their lunches to work. Interested departments are issued a green bin to collect organics material. This container will be emptied into an exterior toter that is picked up weekly and transported to a composting facility. Departments can join the office organics program by filling out an on-line request form. Two buildings on campus have public organics collection: Queen's Centre and John Deutsch University Centre. |
| Electronics | Program already in place. Employees are asked to fill out an online E-waste Disposal Request Form to dispose of electronic equipment such as computers, monitors, keyboards, phones, mice, scanners and printers. The Campus Computer Store is an OES approved ewaste drop-off for the public. |
| Leaf & Yard | Program already in place. Grounds Department ensures all material collected is |
| Scrap Metal | taken to Kingston Area Recycling Centre or is mulched for campus garden beds. Program already in place. The university has a scrap metal recycling program. Scrap metal includes any metal equipment or furniture that are free from hazardous materials. Items accepted for scrap metal recycling include: Steel, Cast Iron, Stainless Steel, Aluminum, Brass, Copper, Lead, Metal Alloys, Electrical Wire, and furniture containing 50% metal, large appliances (Freon removed from fridges). Staff are asked to fill out an online pick up request to schedule a pick up. |

| Т | |
|-------------------|---|
| Paint | Program already in place. Employees are instructed to fill out the online Hazardous Waste Disposal form on the Environmental Health & Safety website |
| | to have paint picked up for disposal. |
| Batteries | Program already in place. Employees are instructed to collect batteries in a |
| | container in their office. When the container is full, employees can either box |
| | them up and fill out the online Hazardous Waste Disposal form on the |
| | Environmental Health & Safety website or place them in RMC Battery Collection |
| | boxes in the main foyers of buildings across campus. |
| Fluorescent Tubes | PPS staff place all burnt out fluorescent tubes in their original boxes and compact |
| | fluorescents lamps are to be stored in a regular cardboard box. Staff tape the |
| | box closed and transport to the designated pick up location. Any broken |
| | fluorescent tubes are to be swept up and put in a plastic bag before placing in a |
| | cardboard box and taping it shut with either duct tape or packing tape. Bulbs are |
| | picked up monthly and sent for recycling. |
| Books | Program already in place. The university currently donates books to Textbooks |
| | for Change. A for-profit company that collects and sells books online to fund |
| | literacy initiatives around the world. Students, staff and faculty can donate their |
| | unwanted books by placing them in public collection boxes in buildings across |
| | campus. |
| | Paperback and hardcover books that are not accepted by Textbooks for change |
| | can be recycled through the Mixed Fibre recycling program. Covers must be |
| F | removed from hardcover books prior to recycling. |
| Furniture | Program already in place. Employees are asked to fill out an online Furniture Pick |
| | Up Request Form to make arrangements for unwanted furnishings. The university also has a furniture reuse program. Employees can contact the Recycling |
| | Coordinator to find out what's available or visit the Freecycle.queensu.ca |
| | website. |
| Grease | Program already in place. Food services groups collect grease from their |
| | operations in exterior containers provided by a grease recycling company. |
| | Grease is collected according to the pick-up frequency required for their |
| | operation. |
| Beer & Liquor | Program already in place. Campus locations that serve alcohol participate in the |
| Bottle Returns | beer and liquor bottle take-back program through their suppliers. |

RESPONSIBILTY FOR IMPLEMENTING THE WASTE AND REDUCTION WORK PLAN

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 # |
|-----------------|----------------------------|--------------|
| | Employee and student | |
| | communication; program | |
| Llynwen Osborne | enhancement and education. | 613-533-3396 |

COMMUNICATION TO STAFF, CUSTOMERS, GUESTS AND VISITORS

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

Written communication is posted electronically on the Sustainability Office website for all employees and students to read, detailing the audit results and the plan to increase and continue with recycling initiatives for all functional areas of the campus. The communication will speak to the Work Plan action items and objectives, and will provide the vehicle necessary to continue towards greater diversion success.

Follow up communications will be provided to inform employees and students of program success, challenges and/or improvements required on a continual basis via departmental social media, university communications and email distribution lists.

Communication Posters: http://www.queensu.ca/sustainability/resources/posters

TIMETABLE FOR IMPLEMENTING WASTE REDUCTION WORK PLAN

| Provide a timetable indicating when each Source Separation and 3Rs program of the Waste Reduction Work Plan will be implemented. | | | |
|--|---|--|--|
| Source Separation and 3Rs Program | Schedule for Completion | | |
| Example: | "Deskside receptacles and centralized containers to be purchased in | | |
| Fine Paper 3Rs Program | 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." | | |
| Mixed Fibre | Program already in place. Continue to educate all | | |
| | employees/students about the materials accepted in the mixed fibre recycling program. | | |
| Cans, Glass & Plastic | Program already in place. Continue to educate all | | |
| | employees/students about the materials accepted in the cans, glass and plastic recycling program. | | |
| Organics | Program already in place. Continue to educate all | | |
| | employees/students about the materials accepted in the organics | | |
| | recycling program, recruit more office to join the Office Organics | | |
| | Program, expand the organics program to public spaces. | | |
| Electronics | Program already in place. Continue to educate all | | |
| | employees/students about the materials accepted in the electronic | | |
| | waste recycling program and the process for scheduling electronic | | |
| | waste pick ups. | | |
| Leaf & Yard Waste | Program already in place. Grounds Department ensures all material | | |
| | collected is taken to Kingston Area Recycling Centre or is mulched for | | |
| | campus garden beds. | | |
| Scrap Metal | Program already in place. Continue to educate all | | |
| | employees/students about the materials accepted in the scrap metal | | |

| | recycling program and the process for scheduling scrap metal pick |
|----------------------|---|
| | ups. |
| Paint | Material is not recyclable. Continue to educate all |
| | employees/students about the paint collection program and how to |
| | contact Environmental Health & Safety to collect unwanted paint. |
| Batteries | Program already in place. Continue to educate all |
| | employees/students about battery recycling and how to contact |
| | Environmental Health & Safety to collect expired batteries. |
| Fluorescent Tubes | Program already in place. Continue to educate Physical Plant Services |
| | staff about how to properly dispose of expired fluorescent tubes and |
| | compact fluorescents. Standard Operating Procedure available in |
| | hard copy and on-line. |
| Books | Program already in place. Ensure all employees/students are |
| | educated on what is accepted in current recycling program and what |
| | is not by fall 2012. Covers from hard cover books must be removed |
| | before placed in recycling containers. |
| Furniture | Material is not recyclable. Ensure employees/students are aware of |
| | campus furniture reuse practices. |
| Grease | Program already in place. Dining Rooms and food outlets participate |
| | in grease recycling practices with an outside contractor. |
| Beer & Liquor Bottle | Program already in place. Campus locations that serve alcohol |
| Returns | participate in the beer and liquor bottle take-back program through |
| | their suppliers. |

ESTIMATED WASTE PRODUCED BY MATERIAL TYPE AND THE PROJECTED AMOUNT TO BE DIVERTED BY THE $3R^{\prime}S$

| Material Categories (as stated in Part III) | Estimated Annual Waste Produced * (tonnes) | Name of Proposed 3Rs Program (as stated in Part III) | Projections to Reduce, Reuse or Recycle Waste (tonnes) | | Estimated Annual Amount to be Diverted ** (%) | |
|--|--|--|--|----------------|---|-----|
| Example: | 1.8 t | Fine Paper 2De Program | Reduce 200 t | Reuse 100 t | Recycle | 83 |
| Fine Paper | 1.8 l | Fine Paper 3Rs Program | 200 1 | 100 1 | 1.2 l | 83 |
| Mixed Fibre | 906.44 | Mixed Fibre Recycling Program | | | 645.47 | 71 |
| Cans, Glass & | | Cans, Glass & Plastic | | | | |
| Plastic | 654.99 | Recycling Program | | | 453.20 | 69 |
| Organics | | Organics Recycling | | | | |
| | 1633.95 | Program | | | 309.84 | 19 |
| Electronics | | Electronic Waste | | | | |
| | 30.02 | Recycling Program | | | 19.89 | 66 |
| Leaf & Yard | | Leaf & Yard Waste | | | | |
| Waste | 59.29 | Recycling Program | | | 58.62 | 99 |
| Scrap Metal | | Scrap Metal | | | | |
| | 77.56 | Recycling Program | | | 77.56 | 100 |
| | | Fluorescent Light | | | | |
| Fluorescent | | Tube Collection | | | | |
| Tubes | 16.33 | Program | | | 3.65 | 22 |

| Books | | Book Reuse & | | | |
|---------------|-------|----------------------|--|-------|-----|
| | 42.50 | Recycling Program | | 19.24 | 45 |
| Furniture | | Furniture Reuse | | | |
| | 25 | Program | | 5 | .05 |
| Grease | | Grease Recycling | | | |
| | 17.64 | Program | | 17.64 | 100 |
| Beer & Liquor | | Beer & Liquor Bottle | | | |
| Bottles | 6.68 | Returns | | 6.68 | 100 |
| Paper | | | | | |
| Shredding | 67.37 | | | 67.37 | 100 |
| | | | | | |

| I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct. | | | | |
|---|---------------------|---------------|--|--|
| Signature of authorized official: | Title: | Date: | | |
| | | | | |
| Llynwen Osborne | Waste & Information | June 30, 2017 | | |
| | Coordinator | | | |