

Attachment 1

Ministry of the Environment Waste Form Report of a Waste Reduction Work Plan 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

Name of Owner and/or Operator of Entity(ies) and Company Name: Brock University			
Name of Contact Person: Domenic Maniccia	Name of Contact Person: Domenic Maniccia	Name of Contact Person: Domenic Maniccia	
Street Address(es) of Entity(ies): 500 Glenridge Avenue			
Municipality: St. Catharines			
Name of Owner and/or Operator of Entity(ies) and Company Name: Brock University			
Retail Shopping Establishments		Hotels and Motels	
Retail Shopping Complexes		Hospitals	
Office Buildings		Educational Institutions	X
Restaurants		Large Manufacturing Establishments	

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

II. DESCRIPTION OF THE ENTITY

Provide a brief overview of the entity(ties): Brock University is an educational institution with a total of 17,877 students in the Fall and Winter Semester and 6,842 students in the Spring/ Summer Semester of the 2010 academic school year. Brock is a comprehensive university with an expansive undergraduate system as well as advanced research, post-graduate and doctoral programs. Brock serves its community as a cultural, academic and recreational centre, bringing excellent facilities to the people who created the University years ago. - Number of academic Faculties — 7 (Applied Health Sciences; Business; Education; Humanities; Mathematics and Science; Social Sciences; and Graduate Studies) - Faculty — 596 - Canada Research Chairs — 10

- Library holdings — 2,007,942
- Professional librarians — 18

III. PLANS TO REDUCE, REUSE AND RECYCLE WASTE

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 (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)	<p><u>“Fine Paper 3Rs Program”</u></p> <p><i><u>Reduce:</u> Staff will be encouraged to print on both sides of each sheet.</i></p> <p><i><u>Reuse:</u> Discarded paper with print only on one side will be used for note pads/scrap.</i></p> <p><i><u>Recycle:</u> 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.</i></p>
Aluminum Food and Beverage Cans	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><i><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks.</i></p> <p><i><u>Reuse:</u> N/A</i></p> <p><i><u>Recycle:</u> Staff/Students will be provided with recycling bins in cafeterias and throughout the school for cans to be placed when emptied. Staff/Students will be encouraged to place aluminum food and beverage cans in appropriate recycling receptacles. Receptacles will be placed in strategic locations in the school with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</i></p>
Cardboard	<p><u>Cardboard/ Boxboard Recycling Program</u></p> <p><i><u>Reduce:</u> Suppliers will be encouraged to make use of reusable containers for the shipment of supplies to Brock University</i></p> <p><i><u>Reuse:</u> Cardboard boxes will be reused for shipments when appropriate.</i></p> <p><i><u>Recycle:</u> Cardboard will be flattened and placed in the recycling bins for Custodial staff to bale and collected by recycling company.</i></p>
Fine Paper	<p><u>Paper Fiber Reduction and Recycling Program</u></p> <p><i><u>Reduce:</u> Staff/Students will be encouraged to print on both sides of each piece of paper as well as not print when it is unnecessary.</i></p> <p><i><u>Reuse:</u> Discarded paper with print only on one side will be used for note pads/scrap paper.</i></p> <p><i><u>Recycle:</u> Staff/Students will be provided with instructions via email. Receptacles will be provided in each office, classroom and high waste generating areas. Staff/Students will empty receptacles into centralized containers. Custodial Staff/Students will empty centralized containers into bulk container at back area for collection Niagara Recycling on a weekly basis.</i></p>
Glass Food and Beverage Bottles/Jars	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><i><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks.</i></p>

	<p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas and food preparation areas for glass containers to be placed when emptied. Staff/Students will be encouraged to place glass containers in appropriate recycling with the appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large 96-gallon roll away bins for collection by Niagara Recycling on a weekly basis.</p>
Newsprint	<p><u>Paper Fiber Reduction and Recycling Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to take reading materials home with them after they are finished with them. Staff and students will be sent, via email, news sources that are available online opposed to paper copies of news.</p> <p><u>Reuse:</u> Staff/Students will be encouraged to leave newspapers they are finished reading in common areas for others to read.</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in office areas for newsprint, fine paper and magazines to be placed when emptied. Staff/Students will be encouraged to place newsprint, fine paper and magazines in appropriate recycling receptacles. Receptacles will be placed in strategic locations in lunchroom and office areas with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</p>
Steel Food and Beverage Cans	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks.</p> <p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas and food preparation areas for cans to be placed when emptied. Staff/Students will be encouraged to place cans in appropriate recycling receptacles. Receptacles will be placed in strategic locations in lunchroom and food preparation areas with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</p>
PET (#1) Plastic Food and Beverage Bottles	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks.</p> <p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas and food preparation areas for plastic bottles to be placed when emptied. Staff/Students will be encouraged to place plastic bottles in appropriate recycling with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</p>
HDPE (#2) Plastic Jugs, Crates, Totes and Drums	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks.</p> <p><u>Reuse:</u> Staff/Students will be encouraged to reuse crates and totes wherever possible.</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas and food preparation areas for plastic jugs, crates, totes and drums to be placed when emptied. Staff/Students will be encouraged to place plastic in appropriate recycling with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</p>

LDPE (#4) Plastic Film	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><u>Reduce:</u> Brock University will encourage suppliers to reduce the amount of plastic film and wrapping materials used to transport supplies.</p> <p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas and food preparation areas for plastic film to be placed when emptied. Staff/Students will be encouraged to place plastic film in appropriate recycling with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</p>
Polystyrene (#6)	<p><u>Brock University Waste Reduction and Recycling Bin Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks. Brock University will encourage suppliers to reduce the amount of polystyrene used to transport supplies.</p> <p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas and food service areas for polystyrene to be placed when emptied. Staff/Students will be encouraged to place polystyrene in appropriate recycling with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large roll away bins for collection by Niagara Recycling on a weekly basis.</p>
Organics	<p><u>Organics Diversion Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to bring uneaten food items home after lunch breaks.</p> <p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Organic bins have been provided in lounges and kitchenettes for the collection of organic waste.</p>
Boxboard Shoe Boxes, Cereal Boxes, etc.	<p><u>Paper Fiber Reduction and Recycling Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks.</p> <p><u>Reuse:</u> N/A</p> <p><u>Recycle:</u> Boxboard will be flattened and placed with the Cardboard in the large recycling bins for Custodial staff to bale and collected by recycling company.</p>
Glossy Magazines, Catalogues, Flyers	<p><u>Paper Fiber Reduction and Recycling Program</u></p> <p><u>Reduce:</u> Staff/Students will be encouraged to take reading materials home with them after they are finished with them. Staff and students will be sent via email news sources that are available online opposed to purchasing paper copies of news.</p> <p><u>Reuse:</u> Staff/Students will be encouraged to leave reading materials they are finished reading in common areas for others to read.</p> <p><u>Recycle:</u> Staff/Students will be provided with recycling bins in high waste generating areas for glossy magazines, catalogues and flyers to be placed when emptied. Staff/Students will be encouraged to place glossy magazines, catalogues and flyers in appropriate recycling with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large 96-gallon roll away bins for collection by Niagara Recycling on a weekly basis.</p>
Wood	<p><u>Wood Recycling Program</u></p> <p><u>Reduce:</u> N/A</p> <p><u>Reuse:</u> Staff will be encouraged to use scrap wood before new wood is purchased</p> <p><u>Recycle:</u> N/A</p>

Steel	<p><u>Scrap Steel Reduction and Recycling Program</u> <u>Reduce:</u> Brock University will investigate through metal optimization study to insure steel is used with as little scrap generated as possible. <u>Reuse:</u> N/A <u>Recycle:</u> Scrap conveyor system will be maintained and Triple M will continue to collect scrap steel for recycling.</p>
Drywall	N/A
Skids	<p><u>Wood Pallet Reuse and Recycling Program</u> <u>Reduce:</u> Staff to monitor use of Pallet to eliminate/reduce broken pallets. <u>Reuse:</u> Staff to Reuse Pallets where possible and practical <u>Recycle:</u> Broken Pallets to be recovered and recycled when possible.</p>
Paper towels	<p><u>Hand Dryer Program</u> <u>Reduce:</u> Replace paper towels in washrooms with hand dryers. <u>Reuse:</u> N/A <u>Recycle:</u> Staff/students will be encouraged to place paper towels in the organics collection program.</p>
Printer cartridges	<p><u>Reduce:</u> N/A <u>Reuse:</u> N/A <u>Recycle:</u> Collected by IT for proper e-waste recycling.</p>
IT Equipment/Audio-Visual Equipment	<p><u>Reduce:</u> N/A <u>Reuse:</u> N/A <u>Recycle:</u> Collected by purchasing services and the student ambassadors for proper e-waste recycling.</p>
Disposable takeout food packaging	<p><u>Brock University Waste Reduction and Recycling Bin Program</u> <u>Reduce:</u> Staff/Students will be encouraged to bring reusable containers for lunch and breaks. <u>Reuse:</u> N/A <u>Recycle:</u> Staff/Students will be provided with recycling or composting bins in cafeteria for disposable takeout food packaging containers (depending on the type) to be placed when emptied. Staff/Students will be encouraged to place the containers in appropriate composting or receptacles. Receptacles will be placed in strategic locations in lunchroom with appropriate signage affixed to the receptacle. Receptacles will be emptied on a regular basis before they become full into large 96-gallon roll away bins for collection by Niagara Recycling or Davidson Environmental on a weekly basis.</p>
Cell phones	<p><u>Reduce:</u> N/A <u>Reuse:</u> N/A <u>Recycle:</u> Staff cell phones are collected by IT for proper e-waste recycling.</p>
Diapers	N/A
Clothing/textiles	<p><u>Rag Reuse Program</u> <u>Reduce:</u> Staff/Students will be encouraged to use rags for multiple tasks before placing in the reuse receptacles. <u>Reuse:</u> Staff/Students will be encouraged to re-use cleaning cloths for multiple tasks before disposing. <u>Recycle:</u> N/A</p>
Coffee/Drink Cups	<p><u>Coffee/ Drink Cup Reduction and Recycling Program</u> <u>Reduce:</u> Staff/Students will be encouraged to use reusable coffee mugs and water bottles <u>Reuse:</u> N/A <u>Recycle:</u> Staff/students will be encouraged to place Coffee/Drink Cups in a separate bin if Brock University can find a program to recycle or compost the coffee and drink cups</p>

IV. RESPONSIBILITY FOR IMPLEMENTING THE WASTE 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 #
Domenic Maniccia	Waste reduction	905-688-5550

V. 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
<i>Example: Fine Paper 3Rs Program</i>	<i>3Rs Program currently in place, additional signage and promotional campaign considered for September 2012.</i>
<i>Brock University Waste Reduction and Recycling Bin Program</i>	<i>3Rs Program currently in place, additional signage and promotional campaign considered for September 2012.</i>
<i>Cardboard/Boxboard Recycling Program</i>	<i>3Rs Program currently in place, additional signage and promotional campaign considered for September 2012.</i>
<i>Scrap Steel Reduction and Recycling Program</i>	<i>Scrap Steel recycling – continued</i>
<i>Coffee/ Drink Cup Reduction and Recycling Program</i>	<i>Coffee/Drink Cup Reduction and Recycling Program currently in place.</i>
<i>Hand Dryer Program</i>	<i>Hand Dryer Program is in place, which would primarily focus on replacing paper towels in washrooms with hand dryers.</i>
<i>Wood Pallet Reuse and Recycling Program</i>	<i>Wood Pallet Reuse and Recycling Program currently in place.</i>
<i>Paper Fiber Reduction and Recycling Program</i>	<i>3Rs Program currently in place, additional signage and promotional campaign considered for September 2012.</i>
<i>Organics Diversion Program</i>	<i>Organics Diversion Program currently in place.</i>
<i>Rag Reuse Program</i>	<i>Rag Reuse Program is being considered.</i>

VI. 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:

Sustainability committee will review the work plan to be posted on University's computer bulletin board for staff and students. Additional promotional campaigns will also be considered to target specific audiences for specific programs.

VII. ESTIMATED WASTE PRODUCED BY MATERIAL TYPE AND THE PROJECTED AMOUNT

Material Categories (as stated in Part III)	Estimated Annual Waste Produced * (kgs)	Name of Proposed 3Rs Program (as stated in Part III)	Projections to Reduce, Reuse or Recycle Waste (kgs)			Estimated Annual Amount to be Diverted ** (%)
			Reduce	Reuse	Recycle	
<i>Example: Fine Paper</i>	<i>1.8 kg</i>	<i>Fine Paper 3Rs Program</i>	<i>200</i>	<i>100</i>	<i>1.2</i>	<i>83</i>
<i>Aluminum food and beverage cans</i>	30,789.69	<i>Brock University Waste Reduction and Recycling Bin Program</i>	10,238.24	N/A	19,011.97	95
<i>Steel Food and Beverage Containers</i>	41,908.25	<i>Brock University Waste Reduction and Recycling Bin Program</i>	16,262.23	N/A	23,550.61	95
<i>Cardboard</i>	336,721.64	<i>Cardboard/Boxboard Recycling Program</i>	23,699.21	15,857.92	280,328.43	95
<i>Coffee/Drink Cups</i>	18,090.63	<i>Coffee/ Drink Cup Reduction and Recycling Program</i>	9,927.36	N/A	7258.74	95
<i>Glass</i>	57,578.99	<i>Brock University Waste Reduction and Recycling Bin Program</i>	18,277.98	N/A	36422.06	95
<i>Polycoat Containers</i>	36,136.42	<i>Brock University Waste Reduction and Recycling Bin Program</i>	16,620.73	N/A	17708.87	95
<i>Metal</i>	33,847.00	<i>Scrap Steel Reduction and Recycling Program</i>	12,966.29	N/A	19188.36	95
<i>Organics</i>	578,262.55	<i>Organics Diversion Program</i>	210,141.14	N/A	339208.28	95
<i>Recyclable Paper</i>	355,677.34	<i>Paper Fiber Reduction and Recycling Program</i>	80,362.47	18,253.82	239277.18	95
<i>Skids</i>	10,250.84	<i>Wood Pallet Reuse and Recycling Program</i>	N/A	9738.298	N/A	95
<i>Recyclable Plastic</i>	118,864.49	<i>Brock University Waste Reduction and Recycling Bin Program</i>	42,591.72	N/A	70329.55	95

* Estimated Waste Produced = Waste Diverted (3Rs) + Waste Disposed

** Estimated Waste Diversion Rate = Amount of Waste Diverted (3Rs) ÷ Estimated Waste Produced
x 100%

I hereby certify that the information provided in this Waste Reduction Work Plan is complete and correct.		
Signature of authorized official: <i>Domenic Manicella</i>	Title: Director, Custodial Services	Date: Feb 22, 2012