

Appendix V
NYC Department of Sanitation
ANNUAL RECYCLING REPORT
for 2002 submitted to the
NYS Department of
Environmental Conservation

Processing and Marketing Recyclables in New York City

47-15-51A(1/03)



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SOLID & HAZARDOUS MATERIALS

ANNUAL RECYCLING REPORT

1. Calendar year	2002	2. Solid Waste Management Planning Unit or Reporting Municipality: New York City Department of Sanitation	
3. Legal Form of Entity (i.e., Authority, Department, Agency, etc.): Agency			
4. Address: Bureau of Waste Prevention, Reuse and Recycling Dept. of Sanitation 44 Beaver Street, 6th Floor New York, NY 10010		Phone: (212) 837-8156	Fax: (212) 837-8026
		Email address: rwlange.nycrecycles@verizon.net	
		<input checked="" type="checkbox"/> Please check here if you do not want your email address printed in the NYS Recycling Bulletin.	
5. Counties or Towns (names) that comprise planning unit:	Counties: Bronx, Kings, New York, Queens, Richmond		6. Total Population 8,008,278
7. Number of Towns	N/A	8. Number of Villages	N/A
9. Cities (names) New York City			
10. Program Contact Person & Title Robert Lange, Director		Department Head & Title John J. Doherty, Commissioner	
11. For responses 12 & 13, please state if data is actual measurements (i.e., scale data), estimates (i.e., from SWMP) for other source (explain): scale data, self-reported, and estimates - see Note 1 to page 1, at end of document.			
12. Solid waste generated within the planning unit for the reporting calendar year: (NHIW: Non-Hazardous Industrial Waste; C&D: Construction & Demolition Debris) (Total Generated=Total Recycled (Grand Total from Page 8)+Total Disposed (#13 on Page 1))			
MSW	6,131,349.00	C&D	9,760,299.00
NHIW			
Sewage Sludge	540,488.00	Total Tons Generated 16,432,136.00	
13. Quantity and method of disposal for all waste generated by the planning unit (PU):			
	Landfilled		Waste-to-Energy
	(Inside PU)	(Outside PU)	(Inside PU) (Outside PU)
			Other or Unaccounted for (describe): see note 2 to page 1, at end of document.
MSW			5,471,452.00
C&D			1,509,837.00
NHIW			
Sewage Sludge			0.00
Total:	0.00	0.00	0.00 0.00 6,981,289.00
			Grand Total: 6,981,289.00
14. Material received for recycling from outside of planning unit or reporting municipality. (For information purposes only. This is not calculated as part of the recycling rate.) Outside entities (municipality or private source):			
			Grand total: 0.00

Notes:

1. Planning Unit data are scale weights recorded for calendar year 2002. Private generator data are a mixture of self-reported and estimated. Most private sector data are for calendar year 2002, but when annual was not available, Fiscal Year (FY) data covering July 1, 2001 - June 30, 2002 were used.

2. Method of disposal is not recorded for Planning Unit or private generators.

15. ☐ Please check if your planning unit has an approved Comprehensive Solid Waste Management Plan and there have been no program changes.

If you have had any changes to your local laws governing recycling, msw and enforcement of solid waste/source separation/recycling laws please describe.

Per Local Law 11 of 2002, curbside/containerized recycling of plastic and glass containers with commingled recycling was suspended as of July 1, 2002. Curbside collection of household metal and paper (in two separate streams) continued.

Residential leaf collection suspended for 2002.

Copy of Local Law 11 attached.

Copy(s) of any new law(s) appended ☒

16. There are many issues that can account for program differences resulting in variations of recycling rates. If you would like, provide an explanation below that characterizes your planning unit. This will help us to provide more information about planning units than just a recycling rate.

The New York City Planning Unit is the Department of Sanitation (DSNY), which manages New York City's residential and public institution waste streams. These streams include MSW generated by residents and institutions, and C&D generated by institutions. Sewage sludge is separately managed by the Department of Environmental Protection (DEP). Commercial waste, including MSW, C&D and sludge, is managed privately.

Due to the mid-year suspension of glass and plastics from the DSNY curbside/containerized recycling program, the MSW diversion rate for the DSNY managed waste stream was 14%, down from roughly 20% the year previous. This MSW diversion rate reflects the recycling of metal, glass, plastic, paper and a very small amount of food and special wastes from the MSW stream that residents and institutions generate. It should be noted that the 14% rate is also down due to the suspension of leaf composting program in 2002. However, since only 4% of NYC's MSW stream is yard waste (as compared to 25% nationally), leaf and other yard waste composting programs -- when fully operational -- only minimally contribute to MSW diversion in New York City. When comparing NYC's MSW diversion rate to other municipalities with significant fractions of yard waste in their MSW, this fact should be borne in mind.

The recycling rate for the C&D portion of the DSNY-managed waste stream is 100%, as is the recycling rate for DEC sewage sludge. Thus the overall recycling rate for the PU is 39%. Factoring in commercial recycling of MSW, C&D and sludge, as calculated on page 9, raises diversion to 59%.

If there is not enough room on page 1 or on any of the other pages, please answer on a separate 8 1/2" x 11" sheet. Use the number corresponding to the question when answering.

General Definitions

Recyclables: those materials recovered from the solid waste stream and transported to a processor or end user for recycling. (National Recycling Coalition, 1995)

Recycling: the series of activities by which recyclables are collected, sorted, processed and converted into raw materials and used in the production of new products. Excludes the use of these materials as a fuel substitute or for energy production.

Reuse: the use of a product or component in its original form for its original purpose, more than once. Examples include: refilling glass or plastic bottles, repairing wood pallets, using corrugated or plastic containers for storage, and returning milk crates.

Additional definitions regarding specific materials are included in Appendix A and B.

Instructions

The attached standardized report forms have been developed to ensure consistent, accurate and complete information. Forms A and B provide for reporting both municipal program (planning unit/system) recycling and non-program/private recycling.

The following appendices are attached at the end of this package to assist in identifying, defining and quantifying recyclables:

Appendix A:	Description of Component Categories
Appendix B:	Material handling of special or unique materials considered recycling (applicable to percentages and goals)
Appendix C:	Volume to weight conversion factors
Appendix D:	Industrial Wastes

Form A

Recyclables are those materials which would, unless recycled, be disposed of in a refuse disposal system. Material categories are described in Appendix A and B.

Planning units must report quantities for individual material categories wherever possible. Totals may be used only when the breakdown is unknown.

Column categories:

Column 2

Solid waste management program or planning unit recycling (Column 2) is that which is operated under the authority of a planning unit. Report mandatory curbside and drop off program material here if it is managed by the planning unit/system. Mark the tonnage with an "M" mandatory or a "V" for voluntary. Materials that are recycled at private facilities, independent of any planning unit contract, should be reported under columns 3 and 4. These would be materials not accepted at a municipally owned MRF; for example, white goods. If a material is a mandated recyclable and is recycled at a private facility, it should be reported under column 3. If a material is not a mandated recyclable being recycled through a private facility, it should be reported in column 4.

Column 3

Column 3 is that mandated recycling which is generally managed by the private sectors, and often includes commercial, industrial or institutional generators which place their recyclable materials with private recyclers. An example may be a local law requiring commercial office paper recycling without any provision by the planning unit/system to handle or contract for the handling of such material. The non-system tonnage may also be reported by generators or recyclers. Care must be taken not to double count material.

Column 4

Non-program non-mandated recycling (Column 4) is that which takes place even though there is no system/planning unit requirement to recycle the specific materials. An example would be a special industrial waste, such as brewer's grain or foundry sand.

Column 5

Place totals from across the row in this column. Total of this column should equal grand total.

Instructions for Reporting Bottle Bill Tonnages

It is very important that these instructions are followed to avoid any double counting. We utilize the figures on redeemed containers received from surveys completed by distributors (deposit initiators) to calculate New York State's recycling data.

If you are reporting any returnable beverage containers that have been redeemed through the New York State Returnable Container Act, enter that information in the Deposit Containers Category on Form A Page 7. Also, please indicate the method used to calculate this redemption data (i.e., estimate of containers redeemed in the planning unit, information obtained from redemption centers, planning unit sorted and redeemed the containers; include whether it is an estimate of the number of units, estimate of weight or scale data).

Deposit containers that are not redeemed but are recycled along with other collected materials should be included in the total tonnages of the appropriate category of material.

Which Column to Use:

Column 2 - Report containers that have been handled and redeemed by the planning unit. (Examples, the planning unit sorts unredeemed deposit containers that have been placed in recycling bins and then takes them to a redemption center to receive the five-cent per container refund or the planning unit actually operates a redemption center.) **This data can be included in the total amount recycled for the planning unit.** The data from this category will be added to the appropriate category of material(s) (i.e., commingled, plastic, aluminum, and/or PET #1) and included in your final summary report published in the New York State Annual Recycling Bulletin.

Column 3 - Non-program/private mandated recycling - If you choose to report containers that have been redeemed in your planning unit but have not been handled by the planning unit. (Examples, you have contacted redemption centers for the number of containers redeemed in your planning unit or you are estimating based on your county's population.) **This total is not to be included in your total amount recycled and therefore should not be used to calculate your recycling rate.**

Form B

Recycling Rate -This form provides the formula for determining the recycling rate.

This form also provides for reporting both planning unit/municipal program waste reduction and reuse and non-program/private waste reduction and reuse. It is provided so that you may document reuse and waste reduction activities.

*Please see Appendices A and B for descriptions of material categories.

FORM A

RECYCLING REPORT

for the calendar year 2002

*Report only outgoing and marketed materials, not incoming.**Exception: yardwaste and other compostables should be reported as incoming.*

Material categories	(1) Material	(2) Planning Unit/System Solid Waste Program Recycling tons Mandatory (M) or Voluntary (V)	M or V	(3) Non-program/private mandated recycling in tons	(4) Non-program/private non-mandated recycling in tons	(5) Total Tons
PAPER	Newspaper	237,028.00	m	see total		237,028.00
	#6 Mix					0.00
	#8 Mix					0.00
	Mixed Paper	37,096.00	m			37,096.00
	Mixed Paper (animal bedding only)					0.00
	Magazines					0
	Corrugated Cardboard	88,886.00	m			88,886.00
	Kraft Paper					0.00
	Gable Top/Drink Boxes					0.00
	Paperboard Chipboard/Boxboard					0.00
	Hardcover Books					0.00
	Softcover Books					0.00
	Office Paper	61.00				61.00
	"Junk Mail"					0.00
	Telephone Directories					0.00
	Commingled Paper (Specify) see note 1 to page 5, at end.			171,000.00		171,000.00
	Other Paper (Specify)					0.00
	PAPER TOTAL	363,071.00		171,000.00	0.00	534,071.00
PAGE TOTAL		363,071.00		171,000.00	0.00	534,071.00

Appendix V: Annual Recycling Report 2002

FORM A (Continued)

Material Categories	(1) Material	(2) Planning Unit/System Solid Waste Program Recycling tons Mandatory (M) or Voluntary (V)	M or V	(3) Non-program/private mandated recycling in tons	(4) Non-program/private non-mandated recycling in tons	(5) Total Tons
PLASTIC	PET #1					0.00
	HDPE #2					0
	LHDPE #2					0.00
	PVC #3					0.00
	LDPE #4					0.00
	LLDPE #4					0.00
	PP #5					0.00
	PS #6					0.00
	Mixed Plastic (specify) see Notes 1 and 2 to p. 6, at end		m			0.00
	Other Plastic (specify) 					0.00
	PLASTIC TOTAL		0.00	0.00	0.00	0.00
ORGANICS (Yard waste listed separately below)	Food Waste	5,151.00	v			5,151.00
	MSW Compost					0.00
	Other Organic	1,636.00	v			1,636.00
	ORGANICS TOTAL		6,787.00	0.00	0.00	6,787.00
METAL	Ferrous and Bi-metal Food Containers (inc. aerosol cans)	46,549.00	m			46,549.00
	Ferrous					
	Enameled Metal Appliances (white goods)	48,481.00	m			48,481.00
	Whole Autos and Parts	14,453.00	m			14,453.00
	Other Ferrous					0.00
	FERROUS TOTAL		109,483.00	0.00	0.00	109,483.00
Non-ferrous	Aluminum Cans/Foil					0.00
	Other Aluminum					0.00
	Other Non-Ferrous					0.00
	NON-FERROUS TOTAL		0.00	0.00	0.00	0.00
PAGE TOTAL			116,270.00	0.00	0.00	116,270.00

Notes

1. Between January 1 and June 30, 2002, PU recycling data were collected for commingled metal, glass and plastic. Between July 1 and December 31, 2002, data for commingled metal (ferrous and nonferrous) only were collected. Column 2 data above show estimated and measured tonnages for commingled metal. Commingled plastic and glass tonnages are reported in the commingled category on page 7, Col. 2.

2. Paper and Commingled metal, glass and plastic are reported together by commercial, private MSW transfer stations. Tonnages are reported in the commingled category on page 7, Col. 3.

Processing and Marketing Recyclables in New York City

FORM A (Continued)

Material Categories	(1) Material	(2) Planning Unit/System Solid Waste Program Recycling tons Mandatory (M) or Voluntary (V)	M or V	(3) Non-program/private mandated recycling in tons	(4) Non-program/private non-mandated recycling in tons	(5) Total Tons
GLASS	Glass - Clear					0.00
	Glass - Green					0.00
	Glass - Brown					0.00
	Glass - Mixed					0.00
	Glass - Plate					0.00
	Other Glass					0.00
	GLASS TOTAL		0.00	0.00	0.00	0.00
COMMINGLED	Glass, metal, plastic containers, other (specify) See Notes 1 and 2	112,565.00	m	63,688.00		176,253.00
DEPOSIT CONTAINERS* This data is optional. See Page 4 for important reporting instructions.	PET#1					Column 2 Total Only 0.00
	GLASS					Column 2 Total Only 0.00
	ALUMINUM					Column 2 Total Only 0.00
	COMMINGLED					Column 2 Total Only 0.00
	DEPOSIT CONTAINERS TOTAL	Add to the page and grand total 0.00		Do not add to the page and grand total 0.00		Column 2 Totals Only 0.00
	Method used to calculate this data (see page 4 instructions):	see note 3 to page 7				
RUBBER	Rubber, tires	3,878.00	m			3,878.00
	Other rubber					0.00
	RUBBER TOTAL		3,878.00	0.00	0.00	3,878.00
TEXTILES	Textiles/leather	182.00	v			182.00
WOOD	Wood Pallets					0.00
	Wood-Lumber					0.00
	Other wood (including C&D wood)					0.00
	WOOD TOTAL		0.00	0.00	0.00	0.00
CONSTRUCTION & DEMOLITION DEBRIS (C&D)/ INERT/ CONTAMINATED SOIL	Asphalt	207,191.00	m			207,191.00
	Concrete/Brick/Rock/Fines	920,756.00	m			920,756.00
	Other C&D/Inert	3,424.00	m		7,119,090.00	7,122,514.00
	Contaminated Soil					0.00
	C&D/INERT/SOIL TOTAL		1,131,371.00	0.00	7,119,090.00	8,250,461.00
PAGE TOTAL			1,247,996.00	63,688.00	7,119,090.00	8,430,774.00

Appendix V: Annual Recycling Report 2002

FORM A (Continued)

Material Categories	(1) Material	(2) Planning Unit/ System Solid Waste Program Recycling tons Mandatory (M) or Voluntary (V)	M or V	(3) Non-program/ private mandated recycling in tons	(4) Non-program/ private non- mandated recycling in tons	(5) Total Tons
YARDWASTE (including yardwaste to be composted)	Leaves	0.00				0.00
	Grass				5,909.00	5,909.00
	Brush					0.00
	Wood-Stumps					0.00
	Mixed yardwaste					0.00
	Other yardwaste					0.00
	YARDWASTE TOTAL		0.00		0.00	5,909.00
BATTERIES, HHW & PAINT	Lead Acid Batteries	67.00	m			67.00
	Dry Cell Batteries	3.30	v			3.30
	Paint					0.00
	Misc. Solvents					0.00
	Other Household Hazardous	9.80	v			9.80
	BATT., HHW, PAINT TOTAL		80.10		0.00	0.00
REFRIGERANTS	Refrigerants	5.33	m			5.33
SLUDGES	Sewage Sludge (wet tons)	524,848.00				524,848.00
	Water Treatment Plant Sludge					0.00
	Paper Mill Sludge				15,600.00	15,600.00
	SLUDGES TOTAL		524,848.00		0.00	15,600.00
OIL, ANTIFREEZE	Used Motor Oil	33.78				33.78
	Used Oil Filters	129.16				129.16
	Antifreeze					0.00
	Other (specify: such as vegetable oils)					0.00
	OIL & ANTIFREEZE TOTAL		162.94		0.00	0.00
OTHER INDUSTRIAL	Specify material (type and quantity) on separate sheet. See Appendix D for examples					0.00
PAGE TOTAL		525,096.37		0.00	21,509.00	546,605.37
GRAND TOTAL		2,252,433.37		234,688.00	7,140,599.00	9,627,720.37

The above information was determined from: Scale data: ☐ Estimates: ☐
Combination of actual measurements and estimates: ☒

FORM B

FORMULA FOR DETERMINING RECYCLING RATE:

Total tons recycled (Grand Total from Column 5, Form A) = A = 9,627,720.37

Total tons solid waste generated (Item 12, cover sheet) = C = 16,432,136.00

RECYCLING RATE = $A \div C \times 100\%$ = 59%

WASTE REDUCTION AND REUSE

See Below for Source Reduction Strategies
Please include methods even if tonnages are unknown.
(Examples: Report pallet reconditioning and textiles reused here.)

METHOD OF REDUCTION	MATERIALS	TONS (if available)
EDUCATIONAL	curriculum guide for NYC schools	
	website, reuse hotline, printed materials	
	community coordinators	
BUSINESS/INSTITUTIONAL ASSISTANCE	website, printed materials, waste audits,	
	materials exchange program	
Grand Total:		0.00

SOURCE REDUCTION STRATEGIES

Use to describe waste reduction and reuse activities.

EDUCATIONAL STRATEGIES

- Elementary/Secondary School Curricula
- Home Composting/Leave It On The Lawn Campaign
- Consumer Source Reduction Shopping Tips
- Junk Mail Reduction Campaign
- Source Reduction Literature, News Articles, Events, etc.

UNIT PRICING

- Pay By Weight or Volume
 - Residential
 - Institutional/Government

STRATEGIES FOR BUSINESSES/INSTITUTIONS

- Waste audits to identify source reduction opportunities
- On-site Business/Institutional composting
- Programs to reduce office paper waste
- Promote business purchasing policy change
- Promote operational changes
- Source reduction for specific sectors
- Reuse, repair and exchange centers

LEGISLATION/REGULATION

- Source Reduction Procurement Policies
- Packaging Regulations
- Bans at disposal facilities
- Hazardous Materials Labeling Regulations

Appendix A

DESCRIPTION OF COMPONENT CATEGORIES

Material	Component Categories	Examples
Paper	Newspaper	Daily, weekly newspapers
	#6 Mix	Newspaper that may include certain amounts of other paper materials depending on mill specs.
	#8 Mix	Newspaper that may include inserts and magazines, but does not include paper such as any brown fibers or mixed paper.
	Mixed Paper (animal bedding only)	Newspaper, magazines, telephone directories and other mixed paper that will be processed for animal bedding.
	Magazines	Periodicals, journals, catalogs and glossy publications.
	Corrugated Cardboard	Multi-layer kraft corrugated shipping boxes and inserts.
	Kraft Paper	Grocery bags and other brown paper bags.
	Gable Top/Drink boxes	Milk and juice paper cartons and aseptic packaging.
	Paperboard/Chipboard/Boxboard	Cereal boxes, shoe boxes, gift boxes and other lightweight cardboard.
	Hardcover Books	Books and novels with hard covers.
	Softcover Books	Books and novels with soft covers.
	Office Paper	Copy paper, computer printout, ledger and letterhead paper.
	Junk Mail	Direct mail, flyers, brochures, envelopes, sweepstake forms, coupons, magazines, school paper and office paper.
	Telephone Directories	Soft cover telephone books both, yellow and white pages.
Plastic	Commingled	Mixed recyclable paper, news, junk mail, magazines, etc.
	Other Paper	Tissue paper, towels, or as specified.
	PET (#1)	Soda bottles, liquor bottles.
	HDPE (#2)	Milk jugs, shampoo bottles.
	LHDPE (#2)	Grocery bags.
	PVC (#3)	Oil bottles, salad dressing.
	LDPE (#4)	Margarine tubs, coffee can lids, mustard containers.
	LLDPE (#4)	Dry cleaning bags, trash bags.
	PP (#5)	Yogurt cups, squeeze-it (burst) bottle.
	PS (#6)	Cups, egg cartons, packing foam.
Organics	Other Plastic	Ketchup bottles, pancake syrup.
	Food Waste	Kitchen scraps, dog food, food processing wastes.
	Other Organics	Brewery waste, fish processing waste.

Appendix A (Continued)

Material	Component Categories	Examples
Ferrous Metal	Food Containers/Bi-metal (inc. Aerosols)	Pet food cans, soda cans, hair spray.
	White Goods/Enameled	Household appliances.
Non-Ferrous Metal	Auto and Auto Parts	Whole autos, pumps, fenders, doors.
	Other Ferrous	Coat hangers, scrap metal.
	Aluminum Cans/Foil	Soda cans, beer cans, pie plates, foil.
	Other Aluminum	Siding, cookware, machine parts.
Glass	Other Non-Ferrous	Eating utensils, electrical wiring.
	Clear Containers	Soda bottles, pickle jars.
	Green Containers	Beer bottles, wine bottles.
	Brown Containers	Beer Bottles, wine bottles.
	Plate Glass	Auto glass, window glass.
	Other Glass	Ceramic glass, light bulbs.
	Pallets	Forklift pallets.
	Lumber	Plywood sections, particle board.
Wood	Other Wood	Crates, sawdust, animal bedding.
Rubber	Rubber	Tires, inner tubes, housewares.
Textiles	Textiles/Leather	Clothes, drapes, shoes, rugs.
Inert	Asphalt - shingles	Roofing, siding.
	Asphalt - paving	Road surfacing.
	Concrete/Brick/Rock	Gravel, house bricks, stones.
	Contaminated Soil	Soil, sand.
	Other Inert	Sheetrock, plaster, insulation.
Yard waste	Leaves	Foliage.
	Grass	Lawn clippings.
	Wood - stumps	Logs and tree stumps.
	Other Yard Waste	Prunings, brush.
Household Hazardous Waste, Batteries, Paint	Lead/Acid Batteries	Auto batteries, marine batteries.
	Dry Cell Batteries	Radio batteries, flashlight batteries, lithium, nickel-cadmium, mercuric oxide and silver oxide button cell batteries, and small sealed lead-acid rechargeable batteries.
	Household Hazardous Waste	Solvents, pesticides.
	Paint	Latex & oil-based paints.

Appendix B

Material handling of special or unique materials, considered recycling (or waste reduction/reuse) by the Department of Environmental Conservation.

Materials	Acceptable
Metals	Lead acid batteries, i.e., automotive batteries.
	Ferrous or non-ferrous materials recovered from waste stream at a MSW disposal facility.
	Ferrous and non-ferrous metal recovered post incineration.
	Any other metals deemed acceptable by the NYSDEC.
Glass	Glass used for leachate collection, landfill cover and landfill gas venting. Cover must be approved by DEC. Cover includes daily, intermediate and final [Part 360-1.15(b)(1) and Part 360-2].
	Uncontaminated glass when used as a substitute for conventional aggregate in asphalt or subgrade applications. Material must substitute for an analogous raw material and not constitute disposal.
Paper	Office/Computer paper. Any paper typically found in an office that is not contaminated by glue, plastic or other foreign matter (e.g., computer print out green bar/blue bar) white or colored writing paper, copier paper, etc.)
	Magazines. Any coated publication (e.g., magazines, catalogues, etc.)
	Mixed paper. Any combination of the above or any other papers that are recycled e.g., telephone directories, window envelopes, books, bulk mail, paperboard, kraft paper. Paper, sewage and other sludges used for landfill cover and C&D material used for landfill cover, PROVIDED A BENEFICIAL USE DETERMINATION (BUD) OR OTHER DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) APPROVAL HAS BEEN OBTAINED.
Commingled	Any combination of food, beverage, detergent or other containers made from glass, plastic and/or metal.
Compost/Mulch	Tonnage documentation of yard waste at time of collection, as long as there is evidence that material will be composted/mulched and marketed. Compost/mulch is considered to be marketed when the material is sold, given away or used in lieu of soil or other soil amendments.
	Grass - clippings from residential or commercial sources. Leaves - from residential or commercial sources. Brush/Branches - small trimmings from trees and shrubs from residential and/or commercial sources. Mixed - any combination of above.
	Compost used for landfill cover. Compost made on-site from waste brewers grain, prison food waste, manure, etc. and used on-site or off-site or compost made from backyard composting.

Appendix B (Continued)

Material	Acceptable
Wood	Wood material [waste lumber, (residential sources), pallets, crates, etc.] that is chipped and used to create a raw material or product that is returned to the marketplace or used in lieu of purchased materials is acceptable NYSDEC tonnage. Pallets that have been refurbished by actually replacing pieces of the pallet can be counted, such as for waste reduction. (Wood chipped and used as fuel is not to be counted.)
Animal and Vegetable Fat	Solid animal fats which are recycled. Grease/oil from restaurants etc., and animal renderings which are reprocessed (such as for animal feed).
Asphalt	Recycling asphalt into new asphalt.
Ash	Ash used for any DEC BUD approved uses. Bottom ash used as road sand, PROVIDED BUD OR OTHER DEPARTMENT APPROVAL HAS BEEN OBTAINED. Materials recovered from bottom ash, such as glass, metals, etc.
Food	Outdated or postdated foods to farmers as feed supplement or for food banks.
Textiles	Verification must be obtained as to the destination and use.
Batteries	Only dry cell batteries that are actually recycled (and not just collected) qualify. Typically, these are mercuric oxide and silver oxide button cell batteries, nickel-cadmium and small sealed lead-acid rechargeable batteries. Large lead-acid (i.e., vehicle) batteries can be assumed to be 100% recycled.
HHW	Only HHW that is actually recycled (and not just collected) qualifies.
Oil	Only oil that is actually recycled (and not just collected) qualifies. Most vehicle oil is reprocessed for burning.
Tires	Tires that are recapped, remanufactured or otherwise made into raw material or product may count toward recycling. Tires chips may be counted when used for civil engineering projects, such as road embankments, PROVIDED BUD OR OTHER DEPARTMENT APPROVAL HAS BEEN OBTAINED. Material must substitute for an analogous raw material and not constitute disposal.
Scrap Automobiles	Scrapped vehicles generated within the jurisdiction and recycled.
Scrap Metal	Ferrous and non-ferrous from industrial, etc., generators.
Waste Grain	Waste grain (e.g., "spent hops") waste whey, etc., used for animal feed.
Other	Septage, yard waste, sludge, food/food processing waste etc., used for proven beneficial uses (such as agricultural, horticultural and silvicultural applications). Compost; paper, sewage, water treatment plant and other sludges; C&D materials; and other materials used for landfill covers, PROVIDED BUD OR DEC APPROVAL HAS BEEN OBTAINED. To count landfill cover material toward recycling, it must substitute for a soil cover material that would, otherwise, have to be brought in from off-site. DEC approved BUDs not noted above. Only those BUDs [either Part 360-1.15(b) or case-specific Part 360-1.15(d)] that are not for energy use (such as TDF or other non-recycling uses) are acceptable.

Appendix C

Volume to Weight Conversion Factors

MATERIAL	EQUIVALENT	
GLASS-whole bottles	1 cubic yard	0.35 tons
GLASS-semicrushed	1 cubic yard	0.70 tons
GLASS-crushed mechanically	1 cubic yard	0.88 tons
GLASS-uncrushed-manually broken	55 gallon drum	0.16 tons
NEWSPRINT-loose	1 cubic yard	0.29 tons
NEWSPRINT-compacted	1 cubic yard	0.43 tons
CORRUGATED-loose	1 cubic yard	0.15 tons
CORRUGATED-baled	1 cubic yard	0.55 tons
PAPER-high grade loose	1 cubic yard	0.18 tons
PAPER-high grade baled	1 cubic yard	0.36 tons
PAPER-mixed loose	1 cubic yard	0.15 tons
PLASTIC-PET-whole	1 cubic yard	0.015 tons
PLASTIC-PET-flattened	1 cubic yard	0.04 tons
PLASTIC-PET-baled	1 cubic yard	0.38 tons
PLASTIC-HDPE-whole	1 cubic yard	0.012 tons
PLASTIC-HDPE-flattened	1 cubic yard	0.03 tons
PLASTIC-HDPE-baled	1 cubic yard	0.38 tons
PLASTIC-mixed	45 gallon bag	0.01 tons
PLASTIC-grocery bags	45 gallon bag	0.01 tons
PLASTIC-styrofoam	45 gallon bag	0.01 tons
PLASTIC-styrofoam	1 cubic yard	0.02 tons
ALUMINUM-cans-whole	1 cubic yard	0.03 tons
ALUMINUM-cans-flattened	1 cubic yard	0.125 tons
FERROUS METAL-cans-whole	1 cubic yard	0.08 tons
FERROUS METAL-cans-flattened	1 cubic yard	0.43 tons
WHITE GOODS-uncompacted	1 cubic yard	0.10 tons
WHITE GOODS-compacted	1 cubic yard	0.5 tons

Appendix C (Continued)

MATERIAL	EQUIVALENT	
YARDWASTE-grass clippings-loose	1 cubic yard	0.3 tons
YARDWASTE-grass clippings-compacted	1 cubic yard	0.6 tons
YARDWASTE-leaves-loose	1 cubic yard	0.125 tons
YARDWASTE-leaves-vacuumed	1 cubic yard	0.15 tons
YARDWASTE-leaves-compacted	1 cubic yard	0.25 tons
YARDWASTE-brush-loose	1 cubic yard	0.25 tons
YARDWASTE-brush-compacted	1 cubic yard	0.5 tons
LEAD-ACID BATTERIES-car	one (39.4 lbs)	0.0197 tons
LEAD-ACID BATTERIES-truck	one (53.3 lbs)	0.0267 tons
LEAD-ACID BATTERIES-motorcycle	one (9.5 lbs)	0.005 tons
LEAD-ACID BATTERIES-combination	use average of 34 lbs	0.017 tons
WASTE OIL	1 gallon	0.004 tons
ANTIFREEZE	1 gallon	0.005 tons
WASTE TIRES-passenger car	one	0.01 tons
WASTE TIRES-truck	one	0.03 tons
WOOD - PALLETS	one	0.14 tons
WOOD - loose dimensional	1 cubic yard	0.12 tons
WOOD - compacted dimensional	1 cubic yard	0.35 tons
WOOD - other	1 cubic yard	0.18 tons
TEXTILES-loose	1 cubic yard	0.10 tons

Appendix D

Industrial Waste - sample categories

This is only a guide to assist in filling out the industrial material identification and quantification on Page 8 and is not meant to be an inclusive list.

Absorbent material	Ink
Alum recovered from water treatment plants	Litho-plates
Animal protein, carcasses, renderings	Masonry
Ash - bottom	Mattresses - processed and remanufactured
Ash	Metal - mixed
Ash - fly	MSW for composting
Boiler cinders	Paint
Boiler slag	Pallets (report reconditioning on Form B only)
Books - unsold and recycled (documented)	Paper from manufacturing process
Carpet remnants returned for remanufacture	Plastic - Acetate
Catalogues	Plastic - other rigid
Circuit boards	Plastic - other flexible
Cloth/textiles - reprocessed	Plastic - nylon
Contaminated soil	Plastic - lead coated
Demolition Debris	Plastic - Acrylic
Drums - plastic	Plastic - ABS
Drums - steel	Roof Shingles from manufacturing process
Electronic Scrap	Scrap metal from landfill or incinerator
Fiberboard	Sludges
Fluorescent tubes	Tires burned as fuel
Foundry waste, may be used in asphalt mix	Tires retreaded and sold
Furniture	Toner cartridges
Grain waste from brewery, may be sold for animal feed	Vegetable waste from processor
Hatchery waste processed into protein supplement	Zoo stall waste composted
Industrial scrap generated and recycled	

Use this page if there is not enough space for any additional information that you need to include. Use the number corresponding to the question answering.

Notes to page 1

1. Planning Unit (PU) data are scale weights recorded for calendar year 2002. Private generator data are a mixture of self-reported and estimated. Most private generator data are for calendar year 2002, but when annual data were not available, Fiscal Year (FY) data covering July 1, 2001 - June 30, 2002 were used.

2. Method of disposal is not recorded for Planning Unit or private generators.

Note to page 5

1. As with last year's report, entry is based on estimate made available from the one municipally contracted paper mill located in New York City. This firm is not required to report data on material from outside the PU. This entry does not reflect tonnages of recycled paper collected from office buildings and trucked to mills, MRFs or transfer stations outside the municipality.

Notes to page 6

1. For the period January 1 through June 30, 2002, PU recycled commingled metal, glass and plastic. For the period July 1 through December 31, 2002, commingled metal (ferrous and nonferrous) only was recycled. The "Ferrous" category for Column 2 (PU material) on page 6 reflects the sum of tonnages of commingled metal collected in both periods. Commingled plastic and glass tonnages for PU material are reported in the "Commingled" category on page 7, Col. 2.

2. For Col. 3 (private material), paper, metal, glass and plastic recycled tonnages are reported in the "Commingled" category on page 7.

Notes to page 7

1. Glass for Cols. 2 (PU material) and 3 (private material) is included in the "Commingled" category for each stream.

2. The "Commingled" category reflects commingled glass and plastic for Col. 2, and commingled paper, metal, glass and plastic (excluding paper recycled by NYC mill) for Col. 3.

3. Deposit containers are included in ferrous and commingled categories for Col. 2 on pages 6 and 7, respectively.

4. Col. 3 (private material) data for C&D and INERT materials are reported in one lump sum.

Notes:

1. Planning Unit data are scale weights recorded for calendar year 2002. Private generator data are a mixture of self-reported and estimated. Most private sector data are for calendar year 2002, but when annual was not available, Fiscal Year (FY) data covering July 1, 2001 - June 30, 2002 were used.

2. Method of disposal is not recorded for Planning Unit or private generators.