Appendix D
Refuse Sample Management Form

Department of Sanitation of New York City
Preliminary Waste Characterization Study
Refuse Sampling - May 17 to May 28th

SAMPLE MANAGEMENT FORM

Date:	5/22/2004	
Hours:	1:15am	
Weather:	Dry	
Transfer Station:	Harlem River	
Sample Manger:	Brian Scott	
Assistant:	Dennis Brown	
Sample Number:	201	
Sample Code:	Q22-2	
Truck Number:	25CU-208	
Sample Weight		
Bin #1	111.9	
Bin #2	100.4	
Bin #3		
Bulk Items		**Description of Bulk Item**
Item #1 Weight	16.8	C&D wood
Item #2 Weight		
Item #3 Weight		
TOTAL SAMPLE WEIGHT	229.1	

Appendix E
Recycling Sample Management Form

Department of Sanitation of New York City
Preliminary Waste Characterization Study
Recycling Sampling - May 17 to May 28th

SAMPLE MANAGEMENT FORM

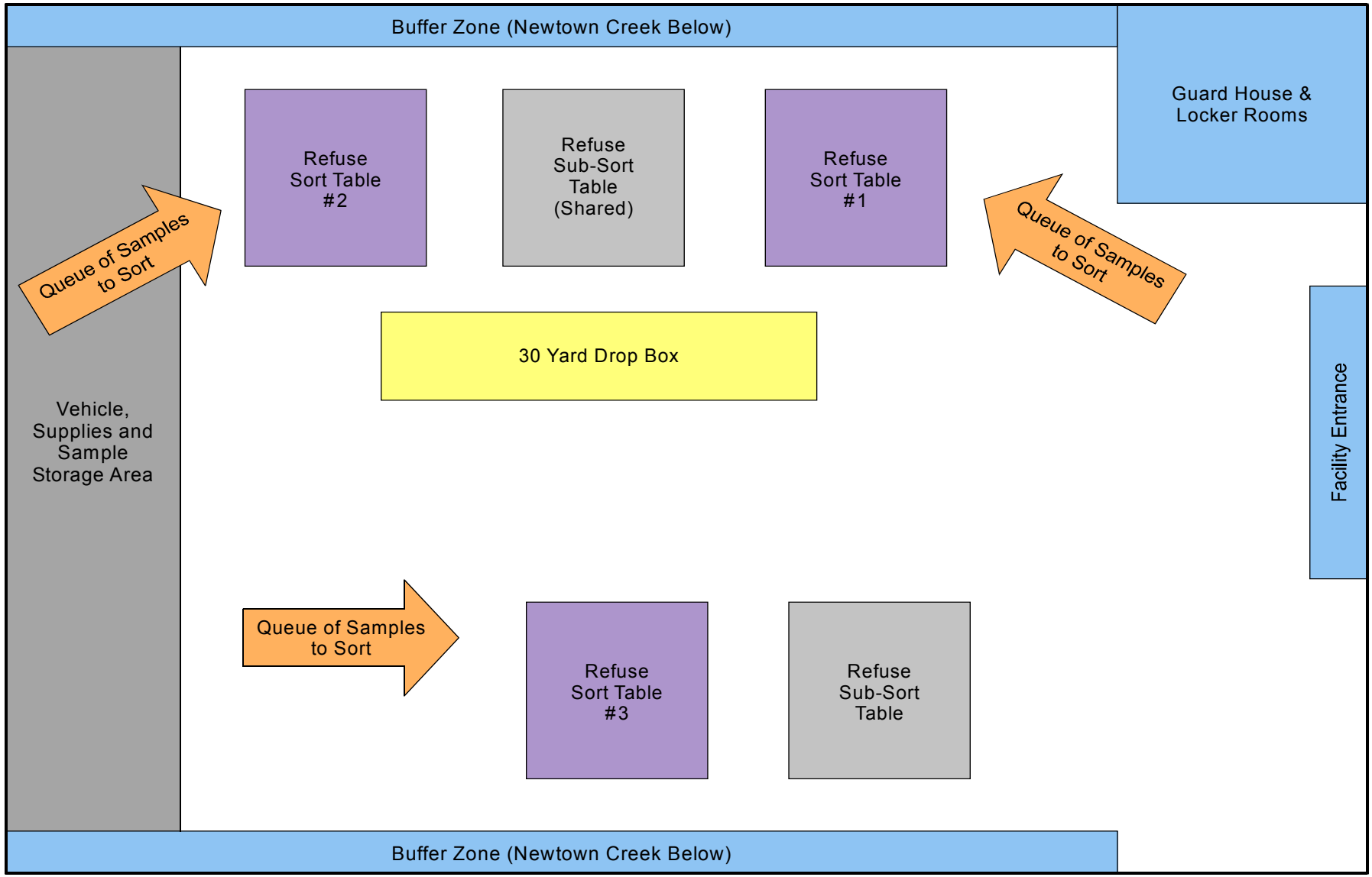
Date:	6/10/2004	
Hours:	2:15am	
Weather:	Clear, Warm	
Transfer Station:	Hugo Nell	
Sample Manger:	Craig Shepard	
Assistant:	Dennis	
Paper or MGP:	MGP	
Sample Number:	114	
Sample Code:	BK-15-2-2	
Truck Number:	25CM-238	
Sample Weight		
Bin #1	110.4	
Bin #2		
Bin #3		
Bulk Items		**Description of Bulk Item**
Item #1 Weight		
Item #2 Weight		
Item #3 Weight		
TOTAL SAMPLE WEIGHT	110.4	

Appendix F
Refuse Site Layout

Physical Layout

The activities that took place within the MTS included storage of equipment, parking Sampling trucks and other vehicles, storage of samples acquired at the transfer stations, sorting and weighing of samples, and placement of roll-off containers for disposal of sorted waste. The general site layout for the Refuse Sort is shown below.

Refuse Site Layout



Appendix G
Recycling Site Layout

Physical Layout

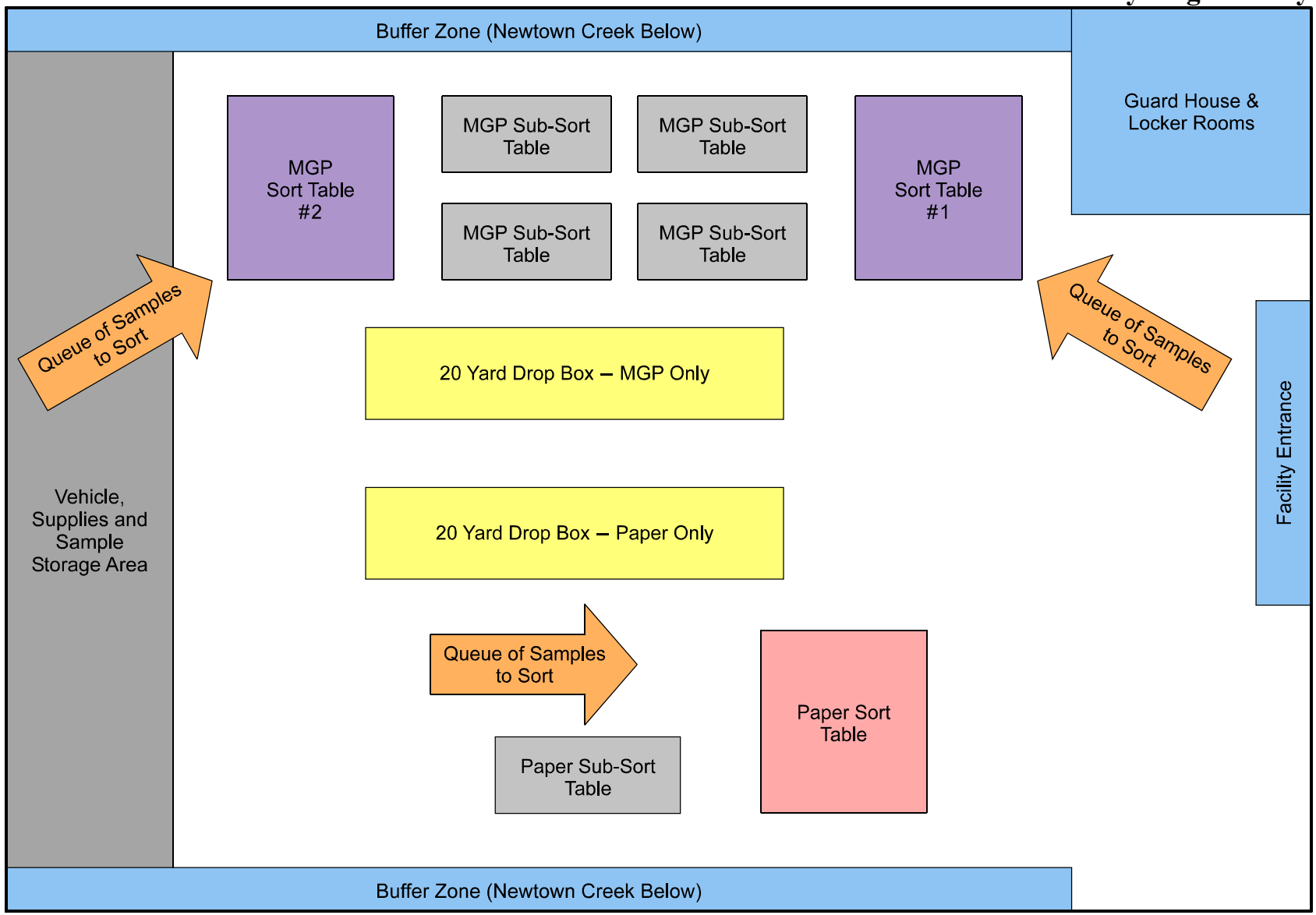
The activities that took place within the MTS included storage of equipment, parking Sampling trucks and other vehicles, storage of samples acquired at the transfer stations, sorting and weighing of samples, and placement of roll-off containers for disposal of sorted waste. The general site layout for the Recycling Sort is shown below.

There were several differences in the site layout at the Recyclables Sort compared to the Refuse Sort. Where the Refuse Sort required a single 30-yard roll-off to dispose of the sorted material, the Recyclable Sort required two 20-yard roll-offs, one of the sorted paper and one for the sorted MGP. The sorted material in these roll-offs was returned to the appropriate processing center – paper to Metropolitan Paper and MGP to Hugo Neu Schnitzer.

At the Refuse Sort, the three sorting stations were made up of a primary sort table, although there were two additional work tables that could be used for subsorting on an as-needed basis by any of the three crews. The Recyclables Sort required a more specialized sorting procedure on the basis of having to further stratify a large number recyclable containers by their deposit status and, in the case of plastic bottles, by their size. In order to manage the sorting and sub-sorting process for the MGP samples, it was necessary to provide two sub-sort tables for each of the two MGP primary sort tables.

Although the configuration of the primary sort tables and the sub-sort tables proved appropriate for the Paper and MGP sorting, incremental efficiencies evolved over the first few days of the sorting period. As the Field Supervisor, Technical Advisor, and Crew Chiefs became more familiar with the nature of the recyclables and the capabilities of the temporary workers, it was possible to optimize the materials requiring sub-sorting and to adjust the bins needed at the primary sort table accordingly.

Recycling Site Layout



Appendix H
R. W. Beck Health and Safety Plan

R.W. BECK, Inc.
Health and Safety Plan for Waste Composition Field Sorting

Date: April 29, 2004

Introduction

Corporate Safety Policy

R.W. Beck, Inc. believes that the health and safety of its employees is of paramount importance. The issue of health and safety is particularly important in conducting solid waste composition field sorting. The terms "waste sort," "waste composition study," "waste characterization study," and the like may be used interchangeably, and all relate to any project that requires the manual handling of municipal solid waste ("MSW") and subsequent sorting and weighing MSW to determine the percentage of different components in the MSW stream.

To address this issue, the following Health and Safety Plan ("HASP") has been developed to provide guidelines to Project Managers, Field Supervisors, Crew Chiefs, and other field workers ("Field Personnel") involved in R.W. Beck's waste characterization studies. This Plan has also been prepared for distribution to third parties, such as R. W. Beck's clients who are commissioning the waste composition study, solid waste management facility managers who may be hosting a waste composition study, and subconsultants retained by the firm to assist with the performance of any of the on-site activities of a waste composition study.

Objectives of the Plan

R.W. Beck's HASP for Waste Characterization Field Sorting has the following four objectives:

- To align R. W. Beck's health and safety efforts with policies and procedures that are already in place at the solid waste management facilities that host waste composition studies,
- To describe the roles and responsibilities of professional staff regarding health and safety,
- To describe the personal and site safety equipment that must be provided at all waste sorting sites,
- To provide field personnel with a description of the safety procedures to be followed in waste sorting,
- To describe the training and monitoring that R. W. Beck field personnel, subconsultants, and temporary workers must undergo before engaging in waste sorting activities.

Host Facility Health and Safety Coordination

Facilities at which R.W. Beck will sort waste may be owned and operated by third parties that have their own health and safety plans and procedures. It is important that, as guests at the facility, R.W. Beck's workers understand and adhere to the facility's health and safety plan. Adherence to the facility plan may include:

- Confining our waste sorting activities to the areas designated by the facility's owner/operator
- Wearing safety equipment required by the facility's owner/operator, and
- Understanding emergency plans and procedures.

It is important that the Field Supervisor or Project Manager work closely with the facility's owner/operator to integrate operations, including training staff regarding health and safety planning. Specific hold harmless of indemnification requirements by the Host Facility should be reviewed in accordance with the firm's Authorization Policy.

Staff Roles and Responsibilities

Every waste characterization study is unique in some way. Differences in the scope of work, size of the project, and sorting sites, for example, will require different configurations of staffing. However, for the purposes of this Health and Safety Plan, the responsibilities of four types of professionals are described here: (1) Safety Manager, (2) Project Manager, (3) Field Supervisor, and (4) Crew Chief. Some of these roles may overlap in practice. Their roles and responsibilities in the safety effort are described below.

Safety Manager

The Safety Manager is an R. W. Beck employee who is responsible for overseeing the health and safety policies and practices for all waste characterization projects across the firm. This responsibility includes seeing that the HASP is up-to-date, that an appropriate level of safety training for professional staff and temporary workers is maintained, that the most appropriate safety equipment is available to sorting crews, and that issues relating to the health and safety on waste characterization projects have been addressed. The Safety Manager is also responsible for communicating significant HASP changes or updates, newly acquired waste composition-related projects, and any health or safety-related events that occur while performing a waste composition study to R. W. Beck's Risk Management Department so that the firm can comprehensively and accurately monitor the success of the Plan.

Project Manager

The Project Manager of a waste characterization study has overall responsibility for the safety and health of all members of his Project Team. Although he/she will delegate some

of these responsibilities to the Field Supervisor and Crew Chief(s), the Project Manager remains the primary responsible party. The Project Manager must be an R. W. Beck employee.

The Project Manager is responsible for developing a project budget, schedule, and scope of work that provides the time and funds for conducting a safe waste sort. Proper safety equipment (see Section ___ - Safety Equipment) must be obtained and issued to workers, and the training of the professional staff and temporary workers must take place before any actual sorting begins. This training is discussed in more detail below. The Project Manager must instill in his/her Project Team an attitude of prudence and care in carrying out the sort.

The Project Manager is also responsible for coordinating with host facility management regarding risk management issues such as waivers, indemnification, and/or adding the host facility as an additional insured to Beck's insurance policy(s), if required.

The Project Manager is not required to participate in any phases of the on-site waste sorting. However, when less experienced Field Supervisors or Crew Chiefs may be involved, the Project Manager should use professional judgment in deciding whether to observe and/or participate on the initial day of field sorting to assure that health and safety practices are being followed, and to communicate to the client, host facility manager, or other parties in the event of any problems. The Project Manager is also responsible for performing periodic observations, as appropriate, to assure that HASP standards are met.

Field Supervisor

The Field Supervisor is generally the most experienced and knowledgeable member of the field sorting team. The Field Supervisor will be the primary contact with the sorting site owner/operator, coordinating sorting activities with other site activities, and supporting any incidents that may occur.

The Field Supervisor has overall responsibility for the sorting site, including the designation of the area where the sorting will take place. In addition to securing the sorting site (i.e. identifying and marking the boundaries of the sorting site), the Field Supervisor should ensure that the sort workers are protected from other equipment and activities on the site. Typically, the Field Supervisor will oversee the selection, delivery, and queuing of samples. The Field Supervisor has the authority to reject any samples and/or immediately terminate any staff who have not following appropriate health and safety practices.

Crew Chief

The Crew Chief is the individual most directly responsible for the health and safety of the individuals sorting waste. The Crew Chief does not have to be an R. W. Beck employee.

He/She should take a leading role in pre-sort training, be sure that sorting workers have proper personal protective equipment, and that safe sorting procedures are followed throughout the project. As the supervisor working most closely with sorters, the Crew Chief must be alert to unsafe practices (e.g. shoving a hand into the middle of a pile of waste) and warn workers about these practices when they occur. The Crew Chief may be the first person to see an accident and must take appropriate action immediately. The Crew Chief has the authority to immediately terminate sort employees not following appropriate health and safety practices.

Sorter

Sort laborers for waste composition studies may be acquired from multiple organizations, including temporary staffing companies, subconsultants, college or high school internship programs, prison labor programs, professional solid waste trade association membership, and volunteers from numerous other sources (including the client organization and from within R. W. Beck during waste sort training). Regardless of the labor source, sorters are responsible for observing the training provided at the outset of a sort, adhering to the proper health and safety practices throughout the sort, wearing the appropriate personal protective equipment while engaged in sorting, and following the directions provided by the Crew Chief and Field Supervisor at all times. Any sorter not following directions may be terminated immediately without cause.

All MSW site employees, regardless of their level of authority, have the responsibility to report unsafe conditions immediately to their supervisor or to the clients on-site representative.

Safety Equipment

Personal Protection Equipment ("PPE")

The selection of Personal Protective Equipment is based upon a thorough analysis of anticipated and actual hazards on the MSW site.

PPE is broken down into two classes: (1) PPE that must be worn at all times during any sorting of MSW, and (2) PPE that may be required in addition to the required PPE, depending on local host facility requirements and/or work conditions.

The following safety equipment may be provided for each member of the sorting crew (both professional staff and temporary workers), depending on the host facility requirements and comfort.

- Protective coveralls
- Protective eyewear
- Ear plugs
- Dust mask

- Hard hat
- Reflective vest
- Puncture-resistant gloves, and
- Back-support belts
- Would traffic vests be appropriate in some cases?

We require all workers to wear a sturdy work boot, although we do not supply these. A more detailed description of the personal safety equipment is presented in Appendix A. At a minimum, the following equipment must be worn at all times by all members of the sorting crew.

- Protective coveralls
- Protective eyewear
- Puncture-resistant gloves
- Boots

Other PPE may be required depending on the policy of the facility operator or the judgment of the Crew Chief and/or Field Supervisor.

Site Safety Equipment

In addition to the personal safety equipment provided to each worker, each sorting site will have the following equipment,

- A Industrial First Aid Kit;
- An Eye-Wash kit or five eye wash bottles per crew person;
- Moist towelettes;
- Traffic cones;
- Yellow caution tape;
- A fire extinguisher;
- A cell phone or facility-maintained two-way radio ;
- Insect Repellent;
- Ice chest with drinks;
- Tent, if appropriate, and
- Heaters, if necessary.
- Emergency notification information

A more detailed description of the site safety equipment is provided in Appendix B.

Field Sorting Safety Procedures

Site Layout

Waste sorting may take place at a variety of venues – landfills, transfer stations, or other facilities. Before any sorting takes place, an R.W. Beck supervisor must inspect the site for the following::

1. Sorting activities will be well away from other activities, such as equipment and vehicle operations, that might endanger or impede waste sorting work.

2. There is adequate room to carry out the sorting activities, including the receiving and queuing samples and the disposal and recycling of sorted waste. This includes safety precautions in the refuse trucks being used.

3. If the site is outside and extreme weather may be encountered, provisions should be made for a tent or other temporary shelter to be erected.

4. Arrangements for toilet facilities and a "break" area have been made, and;

5. Access to the site by a vehicle moving the sorting equipment and crew on and off the site is available. Or: Transportation of equipment and sort personnel to and from the site is available.

Once a suitable site has been located, the Project Manager or the Field Supervisor will schedule the sort at a time agreed to by the Client and the site owner/operator. When the schedule has been determined, arrangements will be made to deliver sorting and safety equipment to the site.

If the Sorting Site is close to operational activities at the facility, it should be marked with traffic cones or high visibility warning tape so that it is clear to all Field Personnel, subconsultants, temporary workers, and facility workers exactly what area is designated for the sorting activities. It must be made clear that all areas which are not designated for sorting activities are strictly off-limits. See Appendix C for a typical sorting site layout.

MSW Facility Safety Procedures

If the sorting site is located at a facility that disposes, transfers, or otherwise processes MSW, R.W. Beck's Project Manager or Field Supervisor should meet with the Site Owner/Operator to coordinate the safety procedures at the site with R.W. Beck's safety procedures. For example, the site may require the wearing of reflective vests and this must become a requirement for the sorting crew on this project. This meeting must take place before any sorting commences.

The Site Manager should outline the facility's health and safety plan and explain the facility's emergency procedures. The location of the nearest hospital, emergency services, and poison control offices should be obtained from the Site Owner/Operator.

R.W. Beck's Supervisor should provide the Site Owner/Operator with a copy of our Health and Safety Plan, explain our safety procedures, and provide documentation of safety training for the Field Personnel, subconsultants, and temporary workers on the waste sort. During this exchange of information, any potential conflicts in approach or procedures should be resolved and both parties should be clear regarding safety and health issues.

The Project Manager should be prepared to sign an indemnification form, and possibly to add the host landfill as an additional insured on R. W. Beck's general liability policy.

Communications

It is important that supervisory staff be able to communicate with each other at all times. If one of the professional staff must leave the site for some reason, he/she should make it clear where they are going, when they will return, and what steps should be taken in case of an emergency. If, for example, the Crew Chief must leave the site, the Field Supervisor should take over the Crew Chief's duties at the sorting table. Either the Field Supervisor or Crew Chief, or both, should have a working cell phone or a facility-managed two-way radio (a standard item in the Site Safety Equipment) in case of an emergency.

Site Control

The integrity of the sorting site must be maintained at all times. Where appropriate, the area boundaries should be marked. Workers should understand that they must remain within the sort site and that other are on the site are prohibited. Both the Field Supervisor and the Crew Chief are responsible to see that sorting activities and workers stay within the sorting area.

There should be no smoking, eating, or drinking during sorting activities. Food and non-alcoholic liquids must be consumed away from the sorting area. Drinks should be taken in single-use disposable cups or from the original single serve containers. Personal hygiene practices such a hand washing and removal of contaminated coveralls should be conducted prior to eating, drinking or smoking.

Ergonomics

Waste sorts often involve moving and lifting containers of waste that may weigh 100 lbs or more. To prevent back strain and pulled muscles, staff must be trained in proper lifting techniques as part of the pre-sort training. When heavy containers must be moved or lifted, the Crew Chief should assign an appropriate number of workers and material handling equipment to the job.

Environmental Conditions

Extreme Heat

The risk of heat stress can be significant in summer sorts where the temperature and humidity are high. In these conditions, Crew Chiefs should monitor workers for signs of fatigue and listlessness. Breaks in the work schedule, plenty of fluids, and clothing which allows sweat to evaporate can all help to alleviate the dangers of heat stress.

Extreme Cold

Winter sorts may take place at sites with very low temperatures and high winds. Protection from the cold should include proper clothing, walls on the tent to lessen the effects of wind, and electric or gas heaters (properly ventilated). Crew Chiefs should be alert for indications of cold-effects, such as shivering and fatigue.

Fatigue

Most projects have tight schedules and the uncertainties associated with the delivery of solid waste to a landfill or transfer station can interrupt this schedule. As a result, there is usually pressure to work as long and as quickly as possible. This, in turn, can lead to carelessness and worker fatigue. Regular breaks in sorting should be built into the schedule to provide for rest and recuperation. Typically these breaks include 15 minute breaks in the morning and afternoon and a 30-60 lunch break. If sorting goes beyond 8 hours, additional breaks should be scheduled. The judgment of the Crew Chief is critical. Workers showing signs of fatigue should be given an opportunity to rest, especially if they are becoming careless or tired.

Injury Prevention

Three of the most common sources of potential injury in waste sorting are:

- Careless handling of waste,
- Lifting heavy objects, including containers of materials, and
- Walking into areas where heavy equipment is operating.

Risks associated with handling mixed solid waste can include contact with hazardous materials, sharps, and other potentially dangerous objects. Controls against injury associated with those risks are:
(1) Wear proper safety equipment at all times and
(2) Know what you are picking up. Never reach into the middle of a pile of waste to pull out material. Always select only material or objects you can see. Hand rakes can be used to spread out a pile of waste; hands or arms should never be used. Using the puncture-resistant gloves provided to the crew, sorters can more safely remove needles, broken glass, and sharpened metal from a pile of waste, if the sorter sees what he/she is removing and handles it with care.

Unidentifiable Liquids, Powders, or Medical Waste

Unidentifiable liquids or powders should be treated as hazardous. If there is any question about any material or object, the sorter should immediately stop sorting and notify the Crew Chief. If, at any time, the Crew Chief believes that the sample being sorted includes institutional medical waste or a significant amount of hazardous materials, the crew should stop sorting. The Crew Chief and Field Supervisor should confer and determine if that sample should be discarded without further sorting. The sorting of institutional medical waste and commercial hazardous waste is not performed by R. W. Beck, and the responsibility for handling this material shall be solely with the host facility in the event such material is encountered. It is the responsibility of the Field Supervisor to alert the host facility management.

Lifting Controls

The Crew Chief direct lifting activities at all times. Specifically, the Crew Chief should be sure workers asked to move or lift heavy containers of waste have help available from other members of the crew. Items that cannot be lifted safely by multiple sort laborers shall not be manually weighed and shall be removed by other means. If back injuries or muscle pulls do occur, the Crew Chief should have the worker rest and decide if the injury is severe enough to warrant medical attention.

Both the Field Supervisor and the Crew Chief must see that the sorting area is clearly marked and that the sorting crew understands where the boundaries are. Moving through the area outside the sorting area should be done only with the permission and guidance of the Crew Chief.

Bloodborne Pathogens

Injuries involving cuts and puncture wounds can potentially offer an entry-point for bloodborne pathogens, such as those carrying Hepatitis and HIV. Every cut and puncture wound should be treated and the following steps should be taken by the Crew Chief or Field Supervisor:

- Using sterile gloves, immediately clean the wound with antiseptic and wrap in gauze;
- Place the needle or object causing the wound in a plastic bag;
- If, in the judgment of the Crew Chief and Field Supervisor, the wound caused by a hypodermic needle or a metal object, poses a health or safety risk to the worker, the worker will be taken to the nearest hospital or clinic for evaluation and treatment;
- Notify the Site owner/operator, the Employment Agency (if the patient is a temporary worker), and the Project Manager, who in turn should alert the Safety Manager; and the R.W. Beck Risk Manager.
- Document the incident on an accident report form and submit the completed form to the Safety Manager.

Similar steps should be taken if the worker has been exposed to potentially hazardous material and shows abnormal or unusual symptoms.

Accident Reporting & Investigation

As a part of the Site Training of the crew, the Field Supervisor should educate workers so they are familiar with the Emergency Contact Information Sheet (see Appendix D) and that it is clearly posted in the sorting area.

All accidents must be reported in writing by the Crew Chief or Field Supervisor, using the Accident Report Form shown in Appendix E. A copy of the completed form should provided to the Site Owner/Operator, the Employment Agency (if the patient is a temporary worker), the Project Manager, who in turn notifies the Safety Manager.

It is the responsibility of the Safety Manager to maintain a file of completed accident report forms and to see that the "lessons learned" for accidents are incorporated into the HASP. Root cause analysis should be the goal of all accident/incident investigations.

Health and Safety Training

All members of a crew responsible for sorting waste must undergo, at a minimum, the training outlined below.

Professional Staff Training

R.W. Beck's professional staff should, at a minimum, have 8 hours of pre-sort training and serve a 2-day apprenticeship before taking on the role of Crew Chief. The pre-sort training must include review and understanding of the HASP and viewing R.W. Beck's safety videos. Training related to other aspects of the sort, such as material identification can also be done during this 8-hour period. Professional staff should have a current tetanus booster.

A Crew Chief should work for at least one full week before being considered for the position of Field Supervisor.

Sorter Training

Before any waste sorting takes place, the Crew Chief and/or Field Supervisor must review relevant sections of the R.W. Beck HASP with temporary workers, be sure that all safety procedures are clear, and that all questions from the sorters have been answered. A Sorter Training Acknowledgment Form is presented in Appendix E.

Next, a "test sort" should be run at a very slow pace to be certain that all safety equipment is being worn properly and that sorters understand the safe and proper way to sort samples of waste.

At the beginning of each day of the sort, the Crew Chief should take a few minutes to check that all safety equipment is being worn and is in good shape. The Crew Chief should also remind the crew about safe sorting and go over the lessons learned from any accidents, or near accidents that have occurred.

Appendix A: Personal Protection Equipment

Personal Protection Equipment ("PPE") will be supplied to all workers sorting waste to protect them from the various hazards that might be encountered in carrying out their work. Some of the PPE is mandatory and must be worn at all times by all workers. Other PPE may be worn depending on the weather, site conditions, policy of the sorting site, and judgment of the Crew Chief and Field Supervisor.

The mandatory PPE include:

- Protective coveralls – Tyvek or cotton coveralls must be worn at all times to protect worker's clothing from accidental spills, offer an added layer of warmth in cold weather conditions, and provide added visibility to worker's on the site.

- Puncture-resistant gloves – Rubber, plastic, or leather gloves must be worn while sorting waste. They are designed to protect sorters from accidental cuts or punctures from needles, broken glass, and sharpened metal. A latex or cotton inner glove will also be provided.

    - Our preferred gloves are MAPA Stanzoil Heavy-Duty Neoprene Gloves
    - Also, recommended are Wells Lamont Puncture- and cut-resistant gloves and Wells Lamont Drivers gloves.
- Protective Eyewear – to provide splash/spatter protection for the sorters
    - Our preferred eyewear protection is the Uvex Astro 3001 for "over the glasses" style for sorters who need to wear their own glasses and Crews Klondike for others.

- Sturdy work boots in good repair

PPE which may be worn, at the discretion of the Crew Chief or Field Supervisor include:

- Back-support belts
- Dust Masks – a dust mask should provide protection from dust and MSW particulates.

    - Our preferred dust mask is the 3M 3-panel disposable Respirator
    - Also recommended are the AOSafety "Pleats Plus" and the Wils0n Saf-T-FIT N95 Respirators.
- Ear plugs
- Hard hat
- Reflective vest
- Steel-toed boots

All pieces of equipment listed above will be available to all crew members at any time.

Appendix B: Site Safety Equipment

Site Safety Equipment ("SSE") will be available at all times on the sorting site to protect workers from hazards and provide emergency first aid. The standard SSE includes:

- A Industrial First Aid Kit – an OSHA-rated 25-person first aid kit or better
- An Eye-Wash kit or five eye wash bottles per crew.
- Moist towelettes
- Traffic cones – four cones to help demarcate the sorting area
- Yellow caution tape – to mark the sorting area.
- A fire extinguisher – a multi-purpose extinguisher that can be used on ordinary combustibles, flammable liquids, and electrically energized fires.
- A cell phone or facility-managed two-way radio
- Insect Repellent
- Ice chest with drinks

If site conditions and weather warrant, a tent will be provided to protect against sun, rain, and wind. Side flaps may also be installed if the weather is cold and/or windy. For very cold conditions, a gas or electric heater may be used. If a gas heater is used, adequate ventilation must be arranged.

Appendix C: Accident Report Forms

Sort Dates:

Sort Site Information
Location:
Office Telephone:
General Manager:
Site Manager:

Field Supervisor:

Crew Chief(s):

Description of Accident:

- **Date**
- **Name of Injured Person**

Actions Taken:

Reported by: _____
Date: _____

Appendix D: Emergency Contact Form

Sort Dates:

Sort Site Information
Location:
Office Telephone:
General Manager:
Site Manager:

Field Supervisor:

Crew Chief(s):

Local Hospital
Name:
Address:
Telephone:
Directions from Sort Site:

Emergency Medical Services
Name:
Address:
Telephone:
Directions from Sort Site:

Police
Name:
Address:
Telephone:
Directions from Sort Site

Fire
Name:
Address:
Telephone:

Directions from Sort Site

Poison Control Center
Telephone:

R.W. Beck Office
R.W. Beck, Inc
Suite 300
800 N. Magnolia Ave.
PO Box 538814
Orlando, FL 32803
(407) 422-4911
Contact: Debbie McDonough, John Culbertson
Safety Manager:

Appendix E: Sorter Training Acknowledgment Form

A critical element of training personnel to sort refuse is health and safety training. Before any work can begin, all sorting personnel are trained in safe procedures for handling and sorting waste. This training includes the following topics.

- Purpose of the waste sort
- Site layout – Landfill hazards
- Introduction to professional staff roles and responsibilities
- Sorters responsibilities
    - Punctuality
    - Rest
    - No drugs or alcohol
    - No smoking
    - Prescribed medications
- Sort Safety Procedures
    - Waste handling
    - Use of Personal Protective Equipment
    - Site Safety Equipment
    - Designated work and break areas
- Ergonomics
    - Safe lifting to avoid back stress
- Environmental Conditions
    - Heat Stress
    - Cold
    - Fatigue
- Injury Prevention
- Hazardous Wastes
- Bloodborne Pathogens
- Emergency Procedures
- Accident Reporting
- Training Sort

Acknowledgement
I acknowledge that the professional staff from R.W. Beck has discussed and explained the topics listed above, addressed any question I have about these topics, and conducted a training sort to demonstrate the safe handling and sorting of waste.

Signed _____ Date _____

Appendix I
Refuse Materials Categories List

NYC Waste Characterization Study
FINAL REFUSE MATERIAL SORT CATEGORIES
Tuesday, May 11, 2004

Group		Category	Description	Subsort(s)	Include Count	Moisture/ Contamination Test
Paper	1	NEWSPAPER	Printed ground wood newsprint (Advertising "slicks" (glossy paper), if found mixed with newspaper; otherwise, ad slicks are included with mixed low grade.).			✓
	2	PLAIN OCC/KRAFT PAPER	Old unwaxed/uncoated corrugated container boxes, and Kraft paper other than paper bags			✓
	3	HIGH GRADE PAPER	White and lightly colored bond, rag, or stationary grade paper. This includes white or lightly colored sulfite/sulfate bond, copy papers, notebook paper, envelopes, Continuous-feed sulfite/sulfate computer printouts and forms of all types, excluding carbonless copy paper			✓
	4	MIXED LOW GRADE PAPER	Includes junk mail, magazines, colored papers, bleached Kraft other than bags, boxboard, mailing tubes, carbonless copy paper, ground wood computer printouts			✓
	5	PHONE BOOKS	telephone directories			✓
	6	PAPERBACKS	paperback books			✓
	7	PAPER BAGS	white, brown or other colored paper bags			✓
	8	POLYCOATED PAPER CONTAINERS	Beverage containers made of bleached and unbleached paperboard coated with HDPE film. This includes polycoated milk and juice containers, and aseptic juice containers, including those with plastic spouts attached. Excludes juice concentrate cans, ice cream containers, and frozen food packaging.			✓
	9	COMPOSTABLE/SOILED PAPER/WAXED OCC/KRAFT	waxed papers and cardboards other papers that were soiled with food during use (e.g., pizza box inserts); paper towels, wipes and napkins. Excludes paper plates, platters, cups, and bowls.			✓
	10	SINGLE USE PLATES, CUPS	paper plates, platters, cups and bowls			✓
	11	OTHER NONRECYCLABLE PAPER	polycoated frozen food and ice cream containers/packaing and other polycoated papers (excluding cups, plates, bowls and platters; milk/juice cartons, and aseptic packaging); paper with other materials attached (e.g. orange juice cans and spiral notebooks), and other non-recyclable papers such as carbon copy paper, hardcover books, and photographs.			✓
Plastic	12	PET BOTTLES	#1 Polyethylene terephthalate translucent bottles and jars.	Deposit, Nondeposit	of deposit only	✓
	13	HDPE NATURAL BOTTLES	High-density translucent polyethylene (#2) milk, juice, beverage, oil, vinegar, distilled water bottles with necks and jars			✓
	14	HDPE COLORED BOTTLES	High-density colored polyethylene (#2) bottles. Liquid detergent bottles, some hair care bottles with necks and jars			✓
	15	#1-#2 TUBS/TRAYS	Wide mouth tubs and trays without a neck, such as yogurt, cottage cheese, and margarine.	#1 PET #2 HDPE		
	16	#3-#7 CONTAINERS	#3, #4, #5 and #7 bottles and tubs	#3 PVC #4 LDPE #5 PP #7 Other		
	17	OTHER PVC	plumbing pipe, identifiable PVC packaging other than PVC bottles/tubs			
	18	RIGID POLYSTYRENE CONTAINERS AND PACKAGING	#6 clear trays, salad containers/trays, clamshells, cookie tray inserts, dairy tubs, CD Boxes			✓
	19	EXPANDED POLYSTYRENE CONTAINERS AND PACKAGING.	Includes packaging and finished products made of expanded polystyrene. Excludes styrofoam plates, cupts, bowls and platters.			✓
	20	OTHER RIGID CONTAINERS/PACKAGING	packaging that is not identifable as #1-6, including containers of all types, clamshells, toothpaste tubes, and plastic spools.			✓
	21	PLASTIC BAGS	plastic bags, including labeled grocery and merchandise, dry cleaner, and newspaper polyethylene film bags. Does not include garbage bags, baggies or ziploc bags; or bags heavily soiled with food.			✓
	22	OTHER FILM:	Film packaging not defined above, or: was contaminated with food, liquid or grit during use; is woven together (e.g., grain bags); contains multiple layers of film or other materials that have been fused together (e.g., potato chip bags); garbage bags, baggies or ziploc bags, plastic wraps.			
	23	PLASTIC CRATES AND SODA BOTTLE CARRIERS				
	24	SINGLE-USE PLATES, CUPS, CUTLERY	plastic spoons, forks, knives, plates, cups, bowls, and platters of various resins, including styrofoam.			✓
	25	SINGLE USE CAMERAS	disposable cameras		✓	
	26	DISPOSABLE RAZORS	self explanatory		✓	

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FINAL REFUSE MATERIAL SORT CATEGORIES
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Group		Category	Description	Subsort(s)	Include Count	Moisture/ Contamination Test
	27	OTHER PLASTICS MATERIALS:	items that are predominately plastic with other materials attached pens, lighters, toys, and 3-ring binders. Finished plastic products made entirely of plastic such as toys, toothbrushes, vinyl hose -- not including plastic crates and soda bottle carriers.			
Glass	28	CLEAR CONTAINER GLASS	Manually sortable glass that is greater than 3" x 3"; Classify containers as "deposit" only if intact or with neck missing; not if in pieces.	Deposit Non-deposit	of deposit only	
	29	GREEN CONTAINER GLASS	Manually sortable glass that is greater than 3" x 3" Classify containers as "deposit" only if intact or with neck missing; not if in pieces.	Deposit Non-deposit	of deposit only	
	30	BROWN CONTAINER GLASS	Manually sortable glass that is greater than 3" x 3" Classify containers as "deposit" only if intact or with neck missing; not if in pieces.	Deposit Non-deposit	of deposit only	
	31	MIXED CULLET	clear, green or brown glass not manually sortable (under 3" x 3"); glass shards			
	32	OTHER GLASS	window glass, mirrors, light bulbs (except fluorescent tubes), glassware, and blue/red/yellow glass bottles.			
Metal	33	ALUMINUM CANS	Aluminum beverage cans (UBC) and bi-metal cans made mostly of aluminum.	Deposit Non-deposit	of deposit only	✓
	34	ALUMINUM FOIL/CONTAINERS	Aluminum food containers, trays, and foil.			✓
	35	OTHER ALUMINUM	Aluminum products and scrap that are 50% or more aluminum, such as window frames, cookware.			
	36	OTHER NONFERROUS	Non-aluminum metals not derived from iron, to which a magnet will not adhere, and which are not significantly contaminated with other metals or materials.			
	37	TIN FOOD CANS	Tinned steel food containers, including bi-metal cans mostly of steel.			✓
	38	EMPTY AEROSOL CANS	Empty, mixed material/metal aerosol cans. (Aerosols that still contain product are sorted according to that material-for instance, solvent-based paint.)			
	39	OTHER FERROUS	Ferrous and alloyed ferrous scrap metals to which a magnet adheres and which are not significantly contaminated with other metals or materials.			
	40	MIXED METALS	Items that are predominately metal with other materials attached such as motors, insulated wire, and finished products containing a mixture of metals, or metals and other materials, that are not classified in the "small appliances" section below. Includes pieces of white goods.			
Organic	41	LEAVES AND GRASS	Non-woody plant materials from a yard or garden area, including grass clippings, leaves, weeds, and garden wastes.			
	42	PRUNINGS	Cut prunings, 6" or less in diameter, from bushes, shrubs, and trees.			
	43	STUMPS/LIMBS	Compostable prunings or stumps 6" or greater in diameter.			
	44	FOOD:	Food wastes and scraps, including bone, rinds, etc. Excludes the weight of food containers, except when container weight is not appreciable compared to the food inside.			
	45	NON-C&D UNTREATED WOOD	Untreated wood products not associated with C&D activities, such as some furniture, popsicle sticks, chopsticks, wooden spoons, and other miscellaneous household wood products			
	46	NONCLOTHING TEXTILES	non-clothing fabrics made of rag stock fabric materials including natural and synthetic textiles such as cotton, wool, silk, woven nylon, rayon, and polyester. Includes handbags, linens, draperies, tablecloths, nylon rope.			✓
	47	CLOTHING TEXTILES	clothing textiles, not including shoes			✓
	48	CARPET/UPHOLSTERY	General category of flooring applications and non-rag stock textiles consisting of various natural or synthetic fibers bonded to some type of backing material.			
	49	DISPOSABLE DIAPERS & SANITARY PRODUCTS	Diapers and sanitary products made from a combination of fibers, synthetic, and/or natural, and made for the purpose of single use. This includes disposable baby diapers, adult protective undergarments, and feminine hygiene products.			
	50	ANIMAL BY-PRODUCTS	Animal carcasses not resulting from food storage or preparation, animal wastes, and kitty litter.			
	51	RUBBER PRODUCTS	Finished products and scrap materials made of natural and synthetic rubber, such as bath mats, inner tubes, rubber hoses, foam rubber, tire pieces, latex gloves. Does not include shoes and boots that are predominantly rubber.			
	52	SHOES	Shoes, sneakers or boots.	Rubber Leather Other	✓	
	53	OTHER LEATHER PRODUCTS	Leather jackets, belts, bags, purses, and other non-shoe leather products.			
	54	FINES	fines smaller than 1/2 inch screen			
	55	MISCELLANEOUS ORGANICS	Wax, bar soap, cigarette butts, briquettes, and fireplace, burn barrel and fire pit ash, vacuum cleaner bags and contents, and other organic materials not classified above.			
Appliances and Electronics	56	SMALL APPLIANCES	Small electric appliances such as toasters, microwave ovens, power tools, curling irons, and light fixtures.			
	57	AUDIO/VISUAL EQUIPMENT	Stereos, radios, tape decks, VCRs, and cell phones.	cell phones	✓	
	58	COMPUTER MONITORS	Items other than televisions containing a cathode ray tube (CRT) such as computer monitors and laptops.			
	59	TELEVISIONS	Television sets containing a cathode ray tube (CRT).			
	60	OTHER COMPUTER EQUIPMENT	Computer items not containing CRTs such as processors, mice and mouse pads, keyboards, and disk drives, and cell phones, calculators			
Construction Debris	61	UNTREATED DIMENSION LUMBER, PALLETS, CRATES	Untreated, milled lumber commonly used in construction for framing and related uses, including 2 x 4's, 2 x 6's.			
	62	TREATED/CONTAMINATED WOOD	Lumber and wood products that have been painted or treated so as to render them difficult to compost (with generally 50% or more of the surface area treated). This includes painted and chemically treated lumber, plywood, strandboard, and particleboard. Predominantly wood and lumber products that are mixed with other materials in such a way that they cannot easily be separated.			
	63	GYPSUM SCRAP	Calcium sulfate dehydrate sandwiched between heavy layers of Kraft-type paper. Also known as drywall.			

NYC Waste Characterization Study
FINAL REFUSE MATERIAL SORT CATEGORIES
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Group	Category		Description	Subsort(s)	Include Count	Moisture/ Contamination Test
	64	FIBERGLASS INSULATION	Fiberglass building and mechanical insulation, batt or rigid.			
	65	ROCK/CONCRETE/BRICKS	Rock gravel larger than 2" diameter, Portland cement mixtures (set or unset), and fired-clay bricks.			
	66	ASPHALTIC ROOFING	Asphalt shingles and tarpaper of built-up roofing.			
	67	OTHER CONSTRUCTION DEBRIS	Construction debris (other than wood) that cannot be classified elsewhere, and mixed fine building material scraps. For example, floor sweepings from construction activities containing sawdust, nails, wire, etc.			
Miscellaneous	68	MISCELLANEOUS INORGANICS	Other inorganic materials not classified elsewhere.			
	69	CERAMICS	Whole or fragmented ceramic or porcelain products larger than 1/2 inch screen			
Household Hazardous Wastes		See Second Tab				

Total **24**

NYC Waste Characterization Study
FINAL REFUSE MATERIAL SORT CATEGORIES--HHW SUBSORTS

HHW Bin Number	Bin Description	Count	Category	Description	Include Count
HHW-1	Automotive-related Products	70	OIL FILTERS	Metal oil filters used in cars and other automobiles.	
		71	ANTIFREEZE	self explanatory	
		72	WET-CELL BATTERIES:	Wet-cell batteries of various sizes and types as commonly used in automobiles.	
		73	GASOLINE/KEROSENE:	Gasoline, diesel fuel, and fuel oils.	
		74	MOTOR OIL/DIESEL OIL:	Lubricating oils, primarily used in vehicles but including other types with similar characteristics.	
HHW-2	HHW Contained in Cans/Bottles/Tubs	75	LATEX PAINTS:	Water-based paints and similar products.	
		76	WATER AND SOLVENT-BASED ADHESIVES/GLUES:	Water or Oil/resin/volatile solvent-based glues and adhesives, including epoxy, rubber cement, two-part glues and sealers, and auto body fillers.	
		77	OIL-BASED PAINT/SOLVENT:	Solvent-based paints, varnishes, and similar products. Various solvents, including chlorinated and flammable solvents, paint strippers, solvents contaminated with other products such as paints, degreasers and some other cleaners if the primary ingredient	
		78	PESTICIDES/HERBICIDES/ RODENTICIDES	Variety of poisons with the purpose of discouraging or killing insects, weeds, vermin, or microorganisms. Fungicides and wood preservatives, such as pentachlorophenol, are also included.	
HHW-3	Dry-cell Batteries	79	DRY-CELL BATTERIES:	Dry-cell batteries of various sizes and types as commonly used in households. Includes cell phone and button cell batteries.	
HHW-4	Other HHW	80	FLUORESCENT TUBES:	Fluorescent light tubes and compact fluorescent bulbs (CFL).	
		81	MERCURY-LADEN WASTES	Thermostats, thermometors, and other items containing mercury.	
		82	COMPRESSED GAS CYLINDERS, FIRE EXTINGUISHERS	self explanatory	
		83	ASBESTOS:	Asbestos and asbestos-containing wastes (if this is the primary hazard associated with these wastes).	
		84	EXPLOSIVES:	Gunpowder, fireworks unspent ammunition, picric acid, and other potentially explosive chemicals.	

NYC Waste Characterization Study
FINAL REFUSE MATERIAL SORT CATEGORIES--HHW SUBSORTS

HHW Bin Number	Bin Description	Count	Category	Description	Include Count
		85	SMOKE DETECTORS		✓
		86	HOME MEDICAL PRODUCTS	Syringes, IV bags, medical tubing	
		87	OTHER POTENTIALLY HARMFUL WASTES:	Caustic acids and bases whose primary purpose is to clean surfaces, unclog drains, or perform other actions; photography chemicals, chemistry sets. Household disinfectants. Pool chemicals.	

Appendix J
Recycling Materials Categories List

NYC Preliminary Waste Characterization Study
RECYCLING / REFUSE
SORT CATEGORIES
8/4/2004

	Category	Description	Subsort deposit legend	Count	Subsort size-type legend	Moisture
	PAPER					
1	NEWSPAPER	Printed ground wood newsprint (Advertising "slicks" (glossy paper), if found mixed with newspaper; otherwise, ad slicks are included with mixed low grade.).				Yes
2	PLAIN OCC/KRAFT PAPER	Old unwaxed/uncoated corrugated container boxes, and Kraft paper other than paper bags				Yes
3	HIGH GRADE PAPER	White and lightly colored bond, rag, or stationary grade paper. This includes white or lightly colored sulfite/sulfate bond, copy papers, notebook paper, envelopes, Continuous-feed sulfite/sulfate computer printouts and forms of all types.				Yes
4	MIXED LOW GRADE PAPER	Includes junk mail, magazines, colored papers, bleached Kraft other than bags, boxboard, mailing tubes, carbonless copy paper, ground wood computer printouts				Yes
5	PHONE BOOKS	telephone directories				Yes
6	PAPERBACKS	paperback books				Yes
7	PAPER BAGS	white, brown or other colored paper bags				Yes
8	POLYCOATED PAPER CONTAINERS	Beverage containers made of bleached and unbleached paperboard coated with HDPE film. This includes polycoated milk and juice containers, and aseptic juice containers, including those with plastic spouts attached. Excludes juice concentrate cans, ice cream containers.				Yes
9	COMPOSTABLE/SOILED PAPER/WAXED OCC/KRAFT	waxed papers and cardboards other papers that were soiled with food during use (e.g., pizza box inserts); paper towels, wipes and napkins. Excludes paper plates, platters, cups, and bowls.				Yes
10	SINGLE USE PLATES, CUPS	paper plates, platters, cups and bowls				Yes
11	OTHER NONRECYCLABLE PAPER	polycoated frozen food and ice cream containers/packaging and other polycoated papers (excluding cups, plates, bowls and platters; milk/juice cartons, and aseptic packaging); paper with other materials attached (e.g. orange juice cans, nut cans, ajax/comet containers)				Yes
	PLASTIC					
12	PET BOTTLES	#1 Polyethylene terephthalate translucent bottles and jars.	Deposit, Non-deposit, Maybe	Yes	Yes	Yes
13	HDPE NATURAL BOTTLES	High-density translucent polyethylene (#2) milk, juice, beverage, oil, vinegar, distilled water bottles with necks and jars	Non-deposit, Maybe	Yes	Yes	Yes
14	HDPE COLORED BOTTLES	High-density colored polyethylene (#2) bottles. Liquid detergent bottles, some hair care bottles with necks and jars	Non-deposit, Maybe	Yes	Yes	Yes
15	#1-#2 TUBS/TRAYS	Wide mouth tubs and trays without a neck, such as yogurt, cottage cheese, and margarine.	#1 PET, #2 HDPE			
16a	#3 BOTTLES		Non-deposit, Maybe	Yes	Yes	
16b	#4 BOTTLES		Non-deposit, Maybe	Yes	Yes	
16c	#5 BOTTLES		Non-deposit, Maybe	Yes	Yes	
16d	#6 BOTTLES		Non-deposit, Maybe	Yes	Yes	
16e	#3-#7 TUBS	#3, #4, #5 and #7 injection molded tubs	#3 PVC, #4 LDPE, #5 PP, #7 Oth	Yes		
17	OTHER PVC	plumbing pipe, identifiable PVC packaging other than PVC bottles/tubs				
18	RIGID POLYSTYRENE CONTAINERS AND PACKAGING	#6 clear trays, salad containers/trays, clamshells, cookie tray inserts, dairy tubs, CD Boxes				Yes
19	EXPANDED POLYSTYRENE CONTAINERS AND PACKAGING.	Includes packaging and finished products made of expanded polystyrene. Excludes styrofoam plates, cups, bowls, takeout clamshells, and platters.				Yes
20	OTHER RIGID CONTAINERS/ PACKAGING	packaging that is not identifiable as #1-6, including containers of all types, toothpaste tubes, and plastic spools. Also: thermaformed/press molded rigid plastics with 1,2,3,4,5 or 7 IPC code. Plastic straws.				Yes
21	PLASTIC BAGS	plastic bags, including labeled grocery and merchandise, dry cleaner, and newspaper polyethylene film bags. Does not include garbage bags, baggies or ziploc bags; or bags heavily soiled with food.				Yes
22	OTHER FILM:	Film packaging not defined above, or: was contaminated with food, liquid or grit during use; is woven together (e.g., grain bags); contains multiple layers of film or other materials that have been fused together (e.g., potato chip bags); garbage bags.				Yes
23	PLASTIC CRATES AND SODA BOTTLE CARRIERS	self explanatory				
24	SINGLE-USE PLATES, CUPS, CUTLERY	plastic spoons, forks, knives, plates, cups, bowls, and platters of various resins, including styrofoam. Cup lids. Takeout clamshells.				Yes
25	SINGLE USE CAMERAS	disposable cameras. Include count.				
26	DISPOSABLE RAZORS	self explanatory; Include count.				

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	Category	Description	Subsort deposit legend	Count	Subsort size-type legend	Moisture
27	OTHER PLASTICS MATERIALS:	items that are predominately plastic with other materials attached pens, lighters, toys, and 3-ring binders. Finished plastic products made entirely of plastic such as toys, toothbrushes, vinyl hose -- not including plastic crates and soda bottle carriers				
	GLASS					
28	CLEAR CONTAINER GLASS	Manually sortable glass that is greater than 3" x 3"; Classify containers as "deposit" or "potential deposit" only if intact or with neck missing; not if in pieces. *Subsort and count: Deposit, Potential Deposit, Nondeposit (see legend).*	Deposit, Non-deposit, Maybe	Yes		
29	GREEN CONTAINER GLASS	Manually sortable glass that is greater than 3" x 3" Classify containers as "deposit" or "potential deposit" only if intact or with neck missing; not if in pieces. *Subsort and count: Deposit, Potential Deposit, Nondeposit (see legend).*	Deposit, Non-deposit, Maybe	Yes		
30	BROWN CONTAINER GLASS	Manually sortable glass that is greater than 3" x 3" Classify containers as "deposit" or "potential deposit" only if intact or with neck missing; not if in pieces. *Subsort and count: Deposit, Potential Deposit, Nondeposit (see legend).*	Deposit, Non-deposit, Maybe	Yes		
31	MIXED CULLET	clear, green or brown glass not manually sortable (under 3" x 3"); glass shards				
32a	OTHER GLASS BOTTLES	Blue, red or yellow bottles	Deposit, Non-deposit, Maybe	Yes		
32b	OTHER GLASS	window glass, mirrors, light bulbs (except fluorescent tubes), glassware, and blue/red/yellow glass bottles. *(For intact blue/red/yellow glass bottles, subsort and count potential deposit and nondeposit containers, see legend).*				
	METAL					
33	ALUMINUM CANS	Aluminum beverage cans (UBC) and bi-metal cans made mostly of aluminum. *Subsort and count: Deposit, Potential Deposit, Nondeposit (see legend)*	Deposit, Non-deposit, Maybe	Yes		Yes
34	ALUMINUM FOIL/CONTAINERS	Aluminum food containers, trays, and foil.				Yes
35	OTHER ALUMINUM	Aluminum products and scrap that are 50% or more aluminum, such as window frames, cookware.				
36	OTHER NONFERROUS	Non-aluminum metals not derived from iron, to which a magnet will not adhere, and which are not significantly contaminated with other metals or materials.				
37	TIN FOOD CANS	Tinned steel food containers, including bi-metal cans mostly of steel.	Deposit, Non-deposit, Maybe	Yes		
38	EMPTY AEROSOL CANS	Empty, mixed material/metal aerosol cans. (Aerosols that still contain product are sorted according to that material-for instance, solvent-based paint.)				
39	OTHER FERROUS	Ferrous and alloyed ferrous scrap metals to which a magnet adheres and which are not significantly contaminated with other metals or materials.				
40	MIXED METALS	Items that are predominately metal with other materials attached such as motors, insulated wire, and finished products containing a mixture of metals, or metals and other materials, that are not classified in the "appliances" section below.				
	ORGANICS					
41	LEAVES AND GRASS	Non-woody plant materials from a yard or garden area, including grass clippings, leaves, weeds, and garden wastes.				
42	PRUNINGS	Cut prunings, 6" or less in diameter, from bushes, shrubs, and trees.				
43	STUMPS/LIMBS	Compostable prunings or stumps 6" or greater in diameter.				
44	FOOD:	Food wastes and scraps, including bone, rinds, etc. Excludes the weight of food containers, except when container weight is not appreciable compared to the food inside.				
45	NON-C&D UNTREATED WOOD	Untreated wood products not associated with C&D activities, such as some furniture, popsicle sticks, chopsticks, wooden spoons, and other miscellaneous household wood products				
46	NONCLOTHING TEXTILES	non-clothing fabrics made of rag stock fabric materials including natural and synthetic textiles such as cotton, wool, silk, woven nylon, rayon, and polyester. Includes handbags, linens, draperies, tablecloths, nylon rope, stuffed toys.				Yes
47	CLOTHING TEXTILES	clothing textiles, not including shoes				Yes
48	CARPET/UPHOLSTERY	General category of flooring applications and non-rag stock textiles consisting of various natural or synthetic fibers bonded to some type of backing material.				
49	DISPOSABLE DIAPERS & SANITARY PRODUCTS	Diapers and sanitary products made from a combination of fibers, synthetic, and/or natural, and made for the purpose of single use. This includes disposable baby diapers, adult protective undergarments, and feminine hygiene products.				
50	ANIMAL BY-PRODUCTS	Animal carcasses not resulting from food storage or preparation, animal wastes, and kitty litter.				
51	RUBBER PRODUCTS	Finished products and scrap materials made of natural and synthetic rubber, such as bath mats, inner tubes, rubber hoses, foam rubber, tire pieces, latex gloves. Does not include shoes and boots that are predominantly rubber.				
52	SHOES	Shoes, sneakers or boots.	Rubber, leather, other	Yes		
53	OTHER LEATHER PRODUCTS	Leather jackets, belts, bags, purses, and other non-shoe leather products.				

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	Category	Description	Subsort deposit legend	Count	Subsort size-type legend	Moisture
54	FINES	fines smaller than 1/2 inch screen				
55	MISCELLANEOUS ORGANICS	Wax, bar soap, cigarette butts, briquettes, and fireplace, burn barrel and fire pit ash, vacuum cleaner bags and contents, crushed upholstered furniture (if an equal mix of wood, and other organic materials not classified above.				
	APPLIANCES AND ELECTRONICS					
56	SMALL APPLIANCES	Small electric appliances such as toasters, microwave ovens, power tools, curling irons, and light fixtures.				
57	AUDIO/VISUAL EQUIPMENT	Telephones, Stereos, radios, tape decks, VCRs, and cell phones.	Cell phone	Cell phone		
58	COMPUTER MONITORS	Items other than televisions containing a cathode ray tube (CRT) such as computer monitors and laptops.				
59	TELEVISIONS	Television sets containing a cathode ray tube (CRT).				
60	OTHER COMPUTER EQUIPMENT	Computer items not containing CRTs such as processors, mice and mouse pads, keyboards, and disk drives, and cell phones, calculators				
	CONSTRUCTION AND DEMOLITION DEBRIS					
61	UNTREATED DIMENSION LUMBER, PALLETS, CRATES	Untreated, milled lumber commonly used in construction for framing and related uses. Pallets and wooden crates.				
62	TREATED/ CONTAMINATED WOOD	Lumber and wood products that have been painted or treated so as to render them difficult to compost (with generally 50% or more of the surface area treated). This includes painted and chemically treated lumber, plywood, strandboard, and particleboard.				
63	GYPSUM SCRAP	Calcium sulfate dehydrate sandwiched between heavy layers of Kraft-type paper. Also known as drywall.				
64	FIBERGLASS INSULATION	Fiberglass building and mechanical insulation, batt or rigid.				
65	ROCK/CONCRETE/BRICKS	Rock gravel larger than 2" diameter, Portland cement mixtures (set or unset), and fired-clay bricks.				
66	ASPHALTIC ROOFING	Asphalt shingles and tarpaper of built-up roofing.				
67	OTHER CONSTRUCTION DEBRIS	Construction debris (other than wood) that cannot be classified elsewhere, and mixed fine building material scraps. For example, floor sweepings from construction activities containing sawdust, nails, wire, etc.				
	MISCELLANEOUS					
68	MISCELLANEOUS INORGANICS	Other inorganic materials not classified elsewhere.				
69	CERAMICS	Whole or fragmented ceramic or porcelain products larger than 1/2 inch screen				

NYC Waste Characterization Study
RECYCLING/REFUSE SORT CATEGORIES--HHW SUBSORTS

HHW Bin Number	Bin Description	Count	Category	Description	Count
HHW-1	Automotive-related Products	70	OIL FILTERS	Metal oil filters used in cars and other automobiles.	
		71	ANTIFREEZE	self explanatory	
		72	WET-CELL BATTERIES:	Wet-cell batteries of various sizes and types as commonly used in automobiles.	
		73	GASOLINE/KEROSENE:	Gasoline, diesel fuel, and fuel oils.	
		74	MOTOR OIL/DIESEL OIL:	Lubricating oils, primarily used in vehicles but including other types with similar characteristics.	
HHW-2	HHW Contained in Cans/Bottles/Tubs	75	LATEX PAINTS:	Water-based paints and similar products.	
		76	WATER AND SOLVENT-BASED ADHESIVES/GLUES:	Water or Oil/resin/volatile solvent-based glues and adhesives, including epoxy, rubber cement, two-part glues and sealers, and auto body fillers.	
		77	OIL-BASED PAINT/SOLVENT:	Solvent-based paints, varnishes, and similar products. Various solvents, including chlorinated and flammable solvents, paint strippers, solvents contaminated with other products such as paints, degreasers and some other cleaners if the primary ingredient	
		78	PESTICIDES/HERBICIDES/ RODENTICIDES	Variety of poisons with the purpose of discouraging or killing insects, weeds, vermin, or microorganisms. Fungicides and wood preservatives, such as pentachlorophenol, are also included.	
HHW-3	Dry-cell Batteries	79	DRY-CELL BATTERIES:	Dry-cell batteries of various sizes and types as commonly used in households. Includes cell phone and button cell batteries.	
HHW-4	Other HHW	80	FLUORESCENT TUBES:	Fluorescent light tubes and compact fluorescent bulbs (CFL).	
		81	MERCURY-LADEN WASTES	Thermostats, thermometors, and other items containing mercury.	
		82	COMPRESSED GAS CYLINDERS, FIRE EXTINGUISHERS	self explanatory	

NYC Waste Characterization Study
RECYCLING/REFUSE SORT CATEGORIES--HHW SUBSORTS

HHW Bin Number	Bin Description	Count	Category	Description	Count
		83	ASBESTOS:	Asbestos and asbestos-containing wastes (if this is the primary hazard associated with these wastes).	
		84	EXPLOSIVES:	Gunpowder, fireworks unspent ammunition, picric acid, and other potentially explosive chemicals.	
		85	SMOKE DETECTORS		Yes
		86	HOME MEDICAL PRODUCTS	Syringes, IV bags, medical tubing, and other home medical products and supplies.	
		87	OTHER POTENTIALLY HARMFUL WASTES:	Caustic acids and bases whose primary purpose is to clean surfaces, unclog drains, or perform other actions; photography chemicals, chemistry sets. Household disinfectants. Pool chemicals.	

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CURRENT DEPOSIT CONTAINERS, POTENTIAL DEPOSIT CONTAINERS, NON-DEPOSIT CONTAINERS
New York State

Deposit Containers
soda pop cans, bottles
beer cans, bottles
wine cooler bottles
seltzer cans, bottles
sparkling water cans, bottles

Potential Deposit Containers
iced tea cans, bottles
still water bottles
gatorade, snapple bottles
flavored water cans and bottles
bottles/cans containing juice drink that is less than 70% pure vegetable or fruit juice

Non-Deposit Containers
milk bottles
liquor and wine bottles
medicine bottles/cans
Ensure or other meal replacement bottles/cans
bottles/cans containing frozen or powdered concentrates
bottles containing non-food items
bottles/cans containing juice drink that is 70% or more pure vegetable or fruit juice

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PLASTIC BOTTLE SUBSORT BY SIZE AND PRODUCT TYPE
New York State

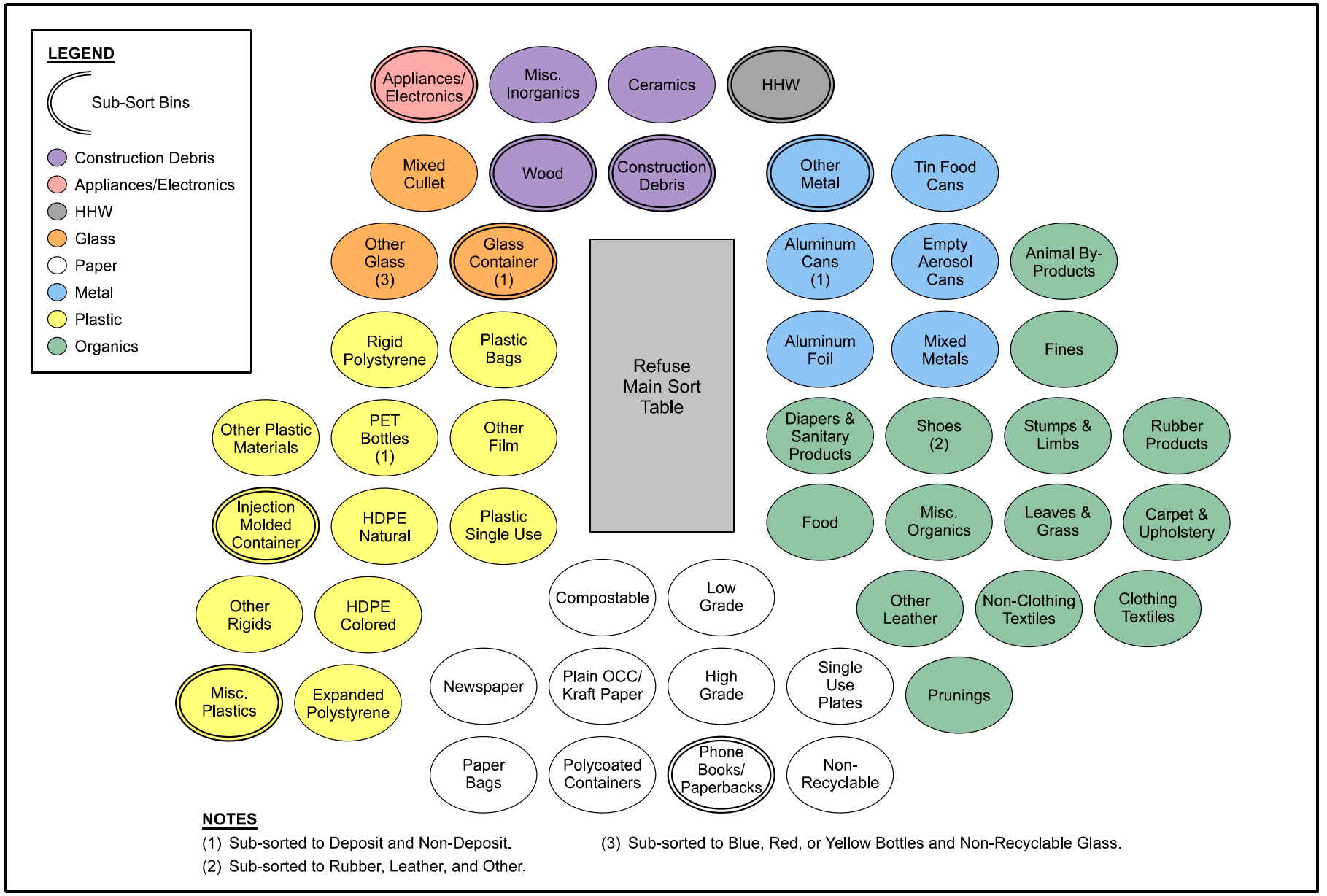
Single Serve Beverage
24-oz
20 oz
16 oz
half liter
12 oz
8 oz & less

Multiple-Serve Beverage
1 gallon and above
half gallon
2 liter and above
1 liter
96-oz
64-oz
48-oz
32-oz

Non-beverage Bottles
non-beverage food bottles
jars (peanut butter, etc)
cleaning products
household products
misc products

Appendix K
Refuse Sorting Procedure

Initial Sort



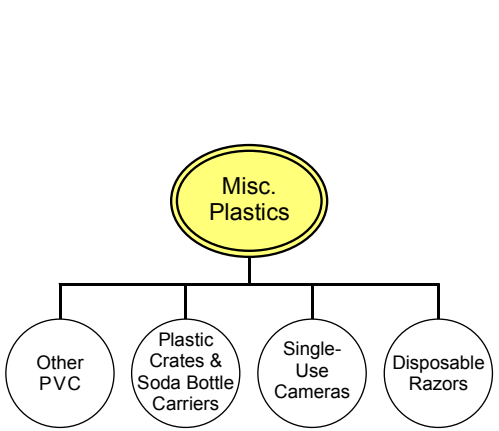
NOTES

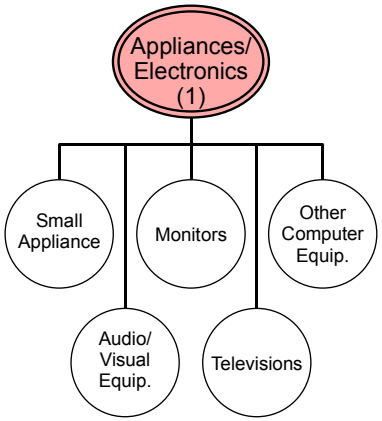
(1) Sub-sorted to Deposit and Non-Deposit.

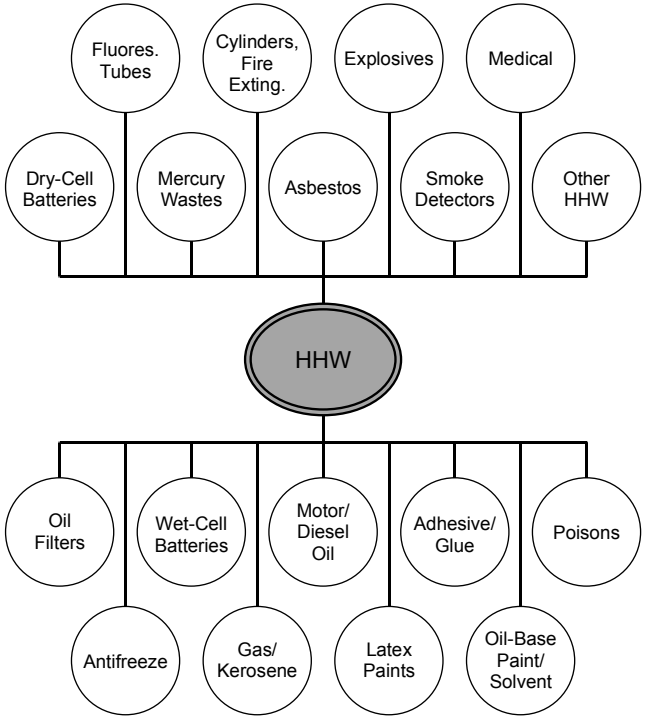
(2) Sub-sorted to Rubber, Leather, and Other.

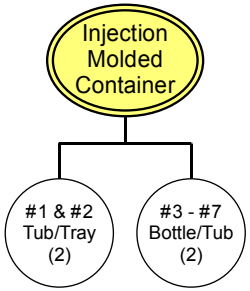
(3) Sub-sorted to Blue, Red, or Yellow Bottles and Non-Recyclable Glass.

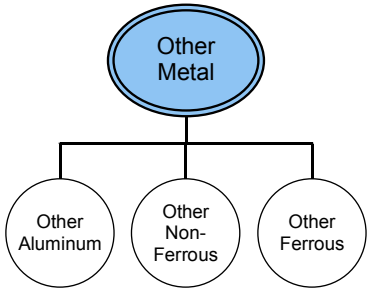
Sub-Sorts for: Appliances/Electronics, Misc. Plastics, Injection Molded Container, Other Metal, HHW







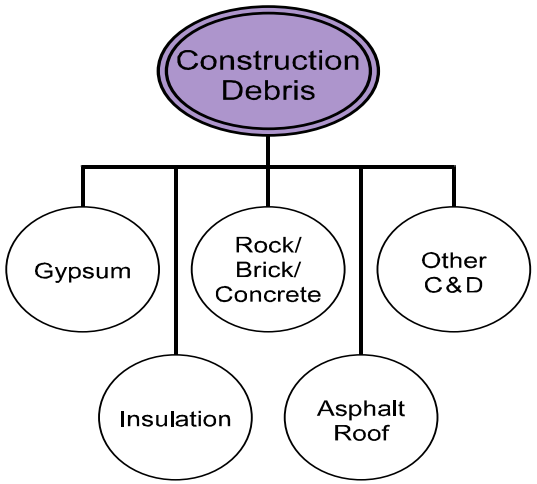


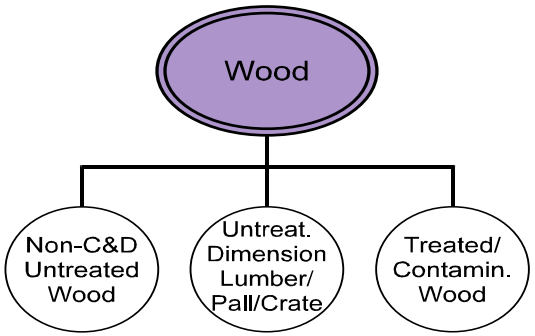


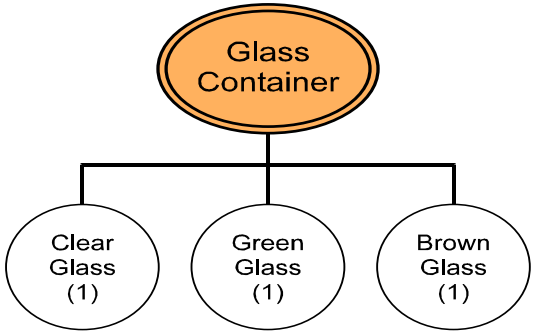
(1) Sorted by metal (50% or more metal) and non-metal

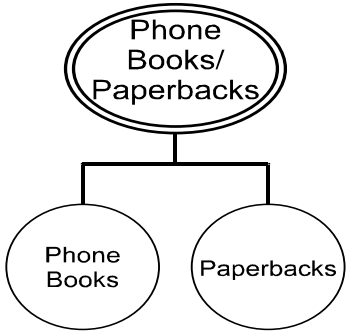
(2) Sub-sorted to stated categories

Sub-Sorts for: Construction Debris, Wood, Glass Container, Phone Books/Paperbacks





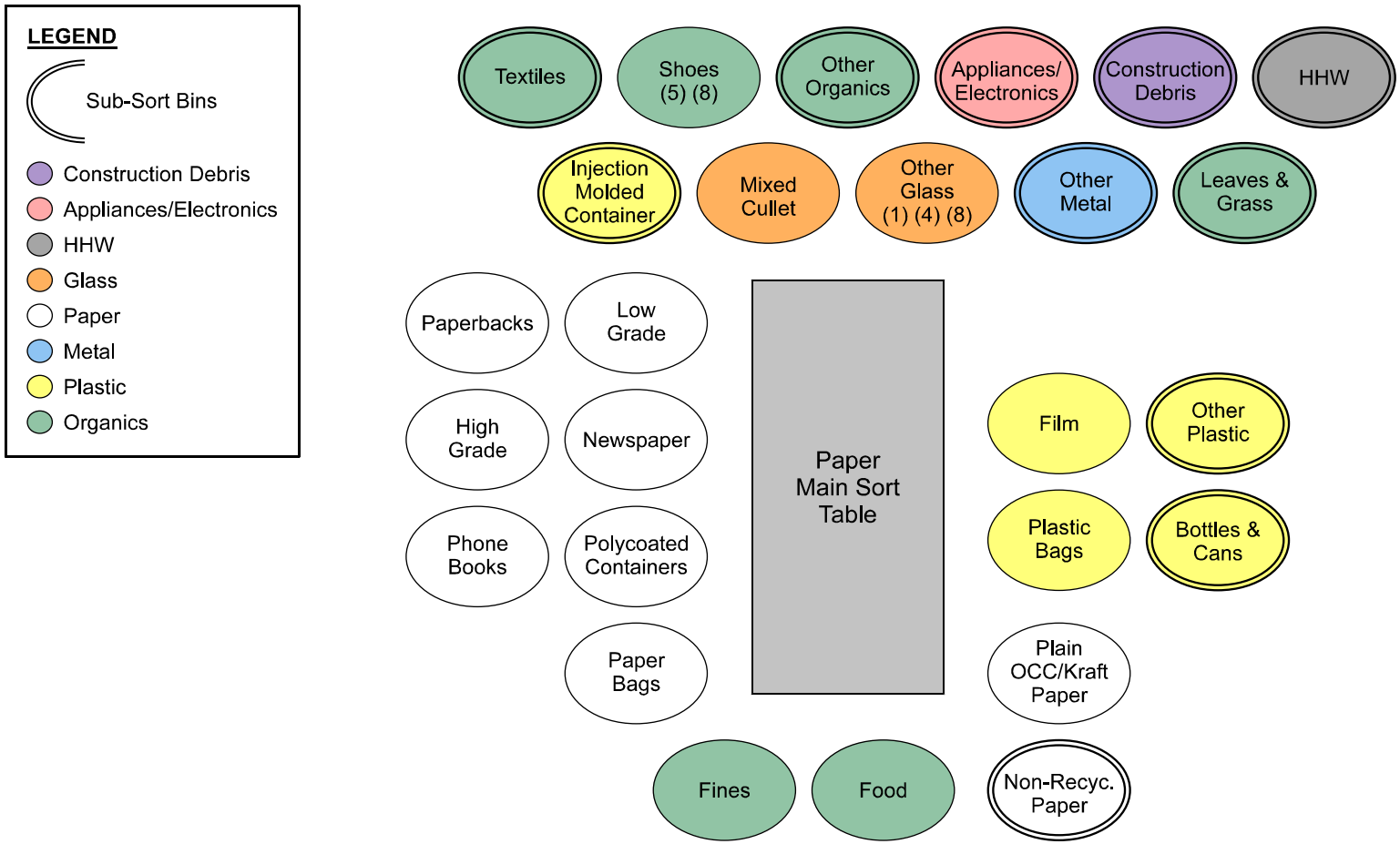




(1) Sub-sorted to Deposit and Non-Deposit

Appendix L
Paper Sorting Procedure

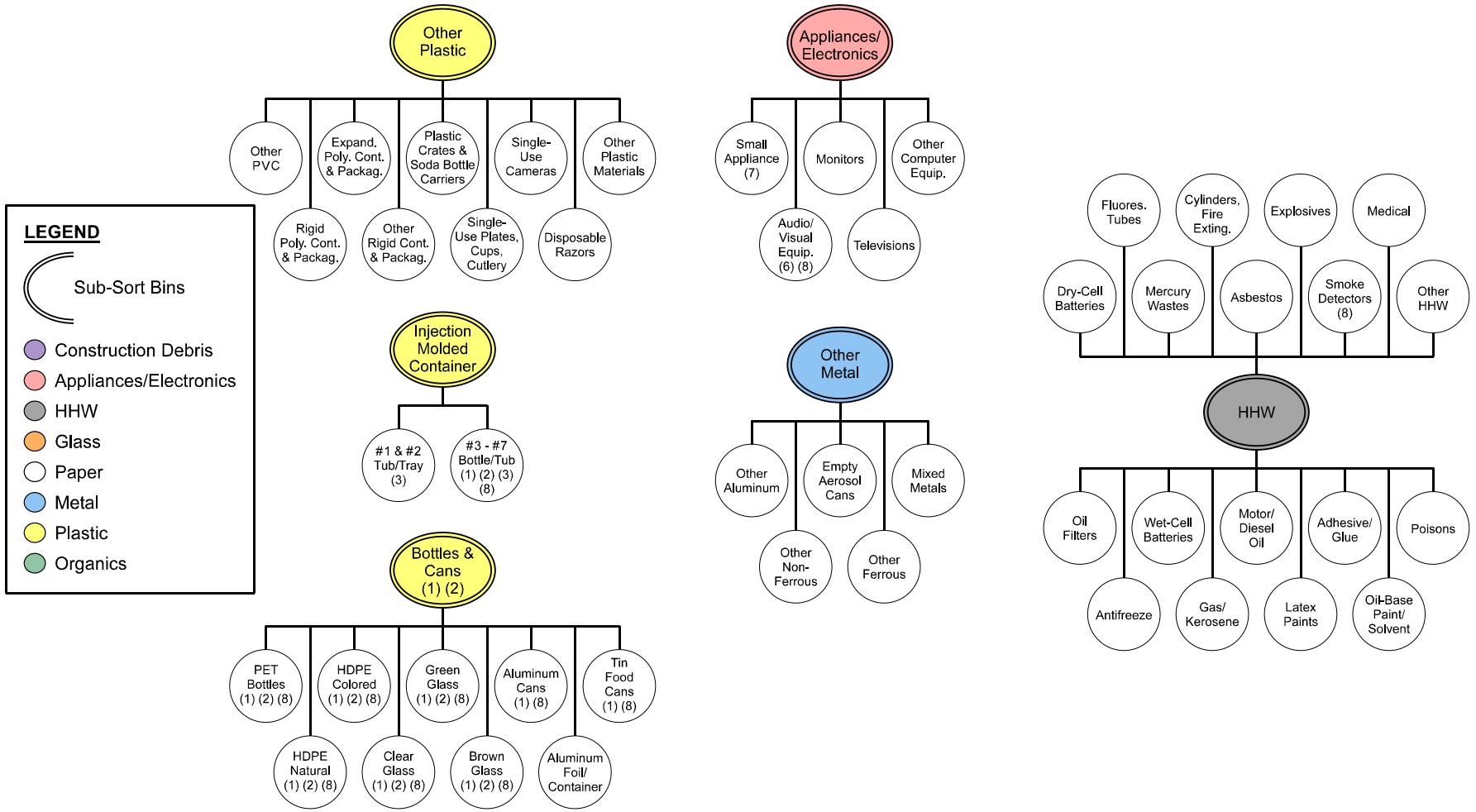
Initial Sort



NOTES

(1) Sub-sorted to Deposit, Non-Deposit, and Maybe as applicable.
(2) Sub-sorted to Single-Serve, Multi-Serve, and Non-Beverage as applicable.
(3) Sub-sorted to stated categories.
(4) Sub-sorted to Blue, Red, or Yellow Bottles and Non-Recyclable Glass.
(5) Sub-sorted to Rubber, Leather, and Other.
(6) Sub-sorted Cell Phones.
(7) Sub-sorted to Metal and Plastic.
(8) Counted as applicable.

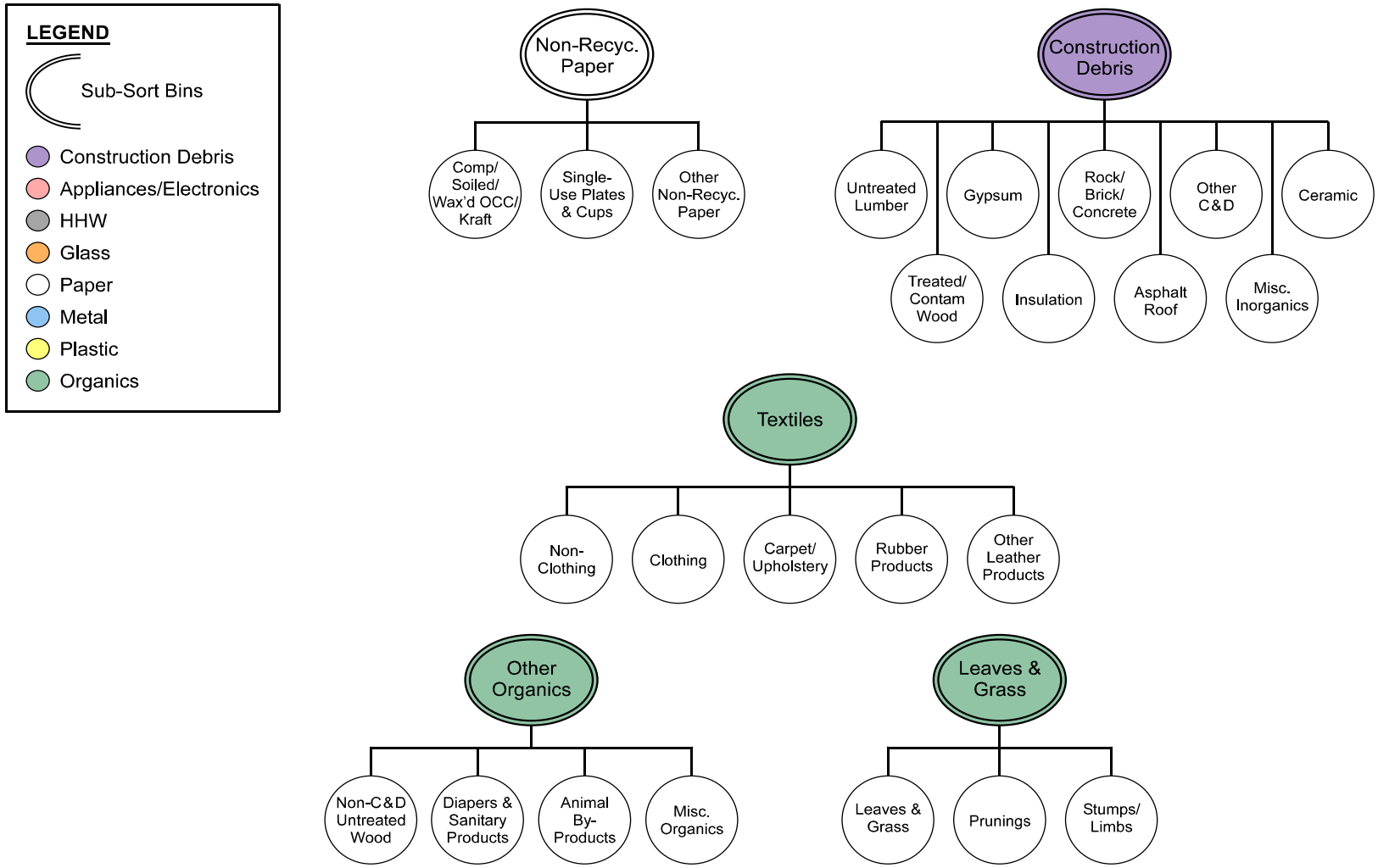
Sub-Sort: Appliances/Electronics, Other Plastic, Other Metal, HHW, Injection Molded Container, Bottles & Cans



NOTES

(1) Sub-sorted to Deposit, Non-Deposit, and Maybe as applicable.
(2) Sub-sorted to Single-Serve, Multi-Serve, and Non-Beverage as applicable.
(3) Sub-sorted to stated categories.
(4) Sub-sorted to Blue, Red, or Yellow Bottles and Non-Recyclable Glass.
(5) Sub-sorted to Rubber, Leather, and Other.
(6) Sub-sorted Cell Phones.
(7) Sub-sorted to Metal and Plastic.
(8) Counted as applicable.

Sub-Sort: Non-Recyclable Paper, Construction Debris, Textiles, Other Organics, Leaves & Grass



NOTES

(1) Sub-sorted to Deposit, Non-Deposit, and Maybe as applicable.
(2) Sub-sorted to Single-Serve, Multi-Serve, and Non-Beverage as applicable.
(3) Sub-sorted to stated categories.
(4) Sub-sorted to Blue, Red, or Yellow Bottles and Non-Recyclable Glass.
(5) Sub-sorted to Rubber, Leather, and Other.
(6) Sub-sorted Cell Phones.
(7) Sub-sorted to Metal and Plastic.
(8) Counted as applicable.