



UNIVERSITY OF NORTH CAROLINA
CHARLOTTE

APPENDIX

WASTE COLLECTION EQUIPMENT

University of North Carolina at Charlotte Standards and Guidelines
APPENDIX – Waste Collection Equipment

1. **Purpose:** To provide standardized equipment and conditions for safe and adequate management of solid waste collected and processed on campus.
2. **Scope:** Solid waste equipment includes indoor recycling stations serving individual and unit needs, outdoor recycling stations serving individuals, and larger outdoor collection equipment. Conditions such as support surfaces, and access will be addressed.
3. **Definition of Terms:**
 - a. Container: A broad term referring to any individual receptacles for collecting and storing trash and recycling materials.
 - b. Cabinet: A stand-alone unit holding containers for two or more waste collection streams.
 - c. Dumpster: A broad term referring to large exterior containers built to be carried or emptied by a specialized truck.
 - d. Recycling Station: a coordinated set of containers, sometimes enclosed by a cabinet, to include trash and recycling streams appropriate to the location.
 - e. Stream: A term referring to specific recycling and trash categories being collected and stored, such as “Trash”, “Cans and Bottles”, “Paper”, or “Cardboard”.
4. **General Requirements:**
 - a. Recycling Station containers must be placed side-by-side or enclosed in a cabinet to always provide users with a trash and recycling stream options. Single or separated bins are not allowed.
 - b. All stream options available must be clearly labeled.
 - c. Cabinets are required for recycling stations located in formal and public areas inside buildings.
 - d. Capacity and number of stations should be designed to meet typical daily occupancy and traffic as well as the expected labor service levels. Occasional events with higher attendance will be addressed with temporary containers and/or services.
 - e. Large event facilities (e.g. stadium, arena, or convention space) will have station number and capacity to address full occupancy at expected labor service levels. Station streams will be customized to the event (e.g., to include composting at food-serving events).
5. **Indoor Recycling Stations**
 - a. **Locations:**
 - i. Interior Recycling Stations should be visible and within 20 feet of each major entrance to a building.
 - ii. Every floor of a building will have a minimum of one Recycling Station in a shared public area.
 - iii. Areas where waste generation occurs and collection service is expected should have a Recycling Station. These include mail rooms, copier rooms, break rooms, kitchens, lounges, and vending areas.

University of North Carolina at Charlotte Standards and Guidelines
APPENDIX – Waste Collection Equipment

- iv. Areas where hazardous waste may be generated, such as laboratories, shops, and bathrooms, are not standard locations for Recycling Stations. Waste stations will be specified on a case-by case basis.

b. Specifications:

- i. Interior Recycling Stations will always provide for three collection streams: “Trash”, “Cans & Bottles”, and “Paper”.
- ii. Containers or cabinets will have restrictive openings as follows. Trash: A square hole with a dimension of 12 inches by 12 inches. Cans & Bottles: A round hole with a diameter of 6”. Paper: slot with a width of 2 inches and length of 12 inches. Restrictive openings or bin lids will be color-coded as follows. Trash: black; Cans & Bottles: blue; Paper: green.
- iii. Cabinets will also meet these requirements:
 - 1. Top slanted towards front to discourage use as a shelf or table.
 - 2. Service doors on front of cabinet to be opened with concealed finger-holds rather than door pulls.
 - 3. Cabinet finishes should be durable, easy to clean, and gray, tan, or dark green in color. High recycled content materials are preferred.
 - 4. Interchangeable top sections to allow for future changes in restrictive opening designs.
 - 5. Framed sign holders (minimum 8.5” X 11”) for periodically updated messages should be located on the front doors or above the unit corresponding with each waste collection category.
 - 6. Meet ADA accessibility standards.

6. Outdoor Recycling Stations

a. Locations

- i. Locations must be serviceable by vehicles using roads and paved paths; exceptions require confirmation that the stations will be serviced by building staff (e.g., outdoor dining balconies).
- ii. High traffic locations must be addressed, including path and road intersections, bus stops, and outdoor dining areas.
- iii. Building entrance locations are discouraged because a higher level of service (more streams) is provided by interior recycling stations.
- iv. Containers must be placed on a solid surface.

b. Specifications:

- i. Recycling Stations will consist of containers for two collection streams: “Cans & Bottles” and “Trash”.
- ii. Standard model is Victor Stanley DYN-SD meeting these requirements:
 - 1. 32 to 38 gallons; 45 gallons is acceptable for outdoor dining areas.

University of North Carolina at Charlotte Standards and Guidelines
APPENDIX – Waste Collection Equipment

2. Metal exterior with Malaga Green coating, enclosing a plastic container.
3. Must have a side-opening door to service the interior container.

7. Dumpster Areas

a. Locations

- i. Must be serviceable by large trucks using paved roads and paved driveways
- ii. Dumpsters must be placed on a concrete pad.
- iii. Access for top loading of dumpsters is preferred (e.g. via adequately sized loading dock). Alternate is side-loading of dumpsters with a path and clearance for handcarts.
- iv. No double-loading (dumpster behind a dumpster).
- v. For streams not covered by available dumpsters, facilities should have loading docks appropriately sized to store waste for collection by box truck.
- vi. Can service multiple buildings to reduce truck traffic on campus, if reasonable distances and paved access is provided.
- vii. Visibility from walkways and roads should be minimized, using landscape materials if necessary.

b. Specifications

- i. Dumpster pad design should consider:
 1. spill containment and drains.
 2. Material strength for repeated contact and weight of dumpsters
- ii. Electricity-powered equipment can be specified to increase capacity for certain streams based on expected waste production (e.g. compactors, balers).