# NORFOLK STATE UNIVERSITY RECYCLING PLAN

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1. **Purpose**

   The implementation of the Norfolk State University Recycling Plan for a campus-wide recycling program is the first step toward developing a comprehensive Recycling Program for Norfolk State University. Recycling is just one part of a much larger program of activities through which Norfolk State University takes an increasingly active role in further understanding and preservation of our environment in the years to come.

**2. Objectives**

It is with considerable pride that we do our part as environmental stewards of Norfolk State University, as we continue to evaluate and adapt to the changing environmental needs of the campus committed to recycling the materials it uses and to minimizing non-hazardous waste. It is the responsibility of every member of the campus community to support these efforts that will protect our environment by conserving resources and preserving rapidly diminishing landfill space.

**3. State or Federal Statute and/or Regulation**

**Executive Order 77**

**Virginia Leading by Example to Reduce Plastic Pollution and Solid Waste** was signed March 2021. This requires all state agencies, including institutions of higher education to cease buying, selling, and distributing single-use plastic and polystyrene food service containers, single-use plastic straws and cutlery, disposable plastic bags, and single-use plastic water bottles by July 21, 2021. The order also calls for agencies to phase-out the use of all other single-use plastics by 2025. This order is a positive step toward making our whole Commonwealth cleaner and our economy more sustainable.

**Executive Order 17**

**Recognizing the Value of Recycling and Waste Reduction (EO 17)** was issued by Governor Glenn Youngkin on April 7, 2022. EO 17 seeks to increase awareness of the importance of recycling, reducing food waste, and encouraging the use of post-consumer recycled materials in manufacturing. Nothing in this Order should restrict any Agency from using any items as necessary to respond to any executive action declaring a state of emergency or order of public health emergency that would otherwise be restricted in use by this Order. This Executive Order rescinds and replaces Executive Order No. 77 (2021) issued by Governor Ralph S. Northam. https://www.governor.virginia.gov/media/governorvirginiagov/governor-of-virginia/pdf/eo/EO-17-Recognizing-The-Value-of-Recycling-and-Waste-Reduction.pdf

**Code of Virginia**

Article 3.2. Recycling Duties of State Agencies and State Universities.

**§ 10.1-1425.6. Recycling programs of state agencies.**

**A.** It shall be the duty of each baccalaureate public institution of higher education in the Commonwealth and state agency of the Commonwealth, including the General Assembly, to establish programs for the use of recycled materials and for the collection, to the extent feasible, of all recyclable materials used or generated by such entities, including, at a minimum, used motor oil, glass, aluminum, office paper and corrugated paper. Such programs shall be in accordance with the programs and plans developed by the Department of Waste Management, which shall serve as the lead agency for the Commonwealth's recycling efforts. The Department shall develop such programs and plans by July 1, 1991.

**B**. In fulfilling its duties under this section, each agency of the Commonwealth shall implement procedures for (i) the collection and storage of recyclable materials generated by such agency, (ii) the disposal of such materials to buyers, and (iii) the reduction of waste materials generated by such agency.

**https://law.lis.virginia.gov/vacodefull/title10.1/chapter14/article3.2/**

## 4. Recycling Procedures

Waste management activities across campus differ depending on stream (trash, recycling, composting, reusable materials electronic, universal, and hazardous) and building type. The management of every material stream on campus has an associated cost. The disposal of trash has been and will continue to be the most expensive method of waste disposal. Diverting waste to other streams such as recycling, and reuse will decrease waste management costs for the university.

The collection process for trash and recycling materials begins with the occupants of each building. Building occupants are responsible for taking their recyclable materials from their offices and rooms to a central collection location in their buildings. This is a voluntary opportunity to participate in the recycling of office recycling materials.

### 4.1. Operations

The Buildings and Grounds housekeeping staff is typically responsible for transferring these materials from the central collection location in the building, to a designated Bay Disposal & Recycling large container pick-up location place strategically in 3 locations on campus to start but as the Recycling Program grows more large containers will be added to support the recycling effort.

1. The Building and Grounds unit utilizes a combination of waste and recycling crews and contracted services to manage trash and recyclable materials.
2. Additional contracted support is utilized for unique events such as student move-in, home football games and student move-out. The university adds temporary receptacles to ensure this waste stream is captured and processed appropriately.

3. Office paper, corrugated cardboard, plastics, bottles, cans, mixed paper, electronics must always be placed in appropriate containers.
4. Staff offices will have a clearly marked container for recyclable paper products, placed near the regular waste receptacle. Office occupants are to periodically deposit the recyclable paper in central collection areas, where it will be collected by the housekeeping staff on Thursday of every week.
5. Office areas, computer labs with printer and/or copiers will have a clearly marked receptacle for recyclable paper products which will be collected by the housekeeping staff on Thursday of every week.
6. These containers will be placed near the copier/printers for easy access.
7. Receptacles for recycling cans, bottles and plastics, paper and non-recyclable waste materials will be placed in easily accessible locations throughout the facility. Containers for recycling printers and toner cartridges will be strategically placed within each building and the location of such containers posted at all recycling locations.
8. Vending machine areas will have appropriately marked recycle containers for bottles and cans, paper materials, and general waste.
9. The auxiliary units (dining, housing, and residential life) will continue implementing and maintaining internal procedures for moving trash and recycling to a central location outside the buildings.

**A. Bay Disposal & Recycling**

Bay Disposal & Recycling has the capability to collect and dispose of single-stream recycling materials while assisting with the ongoing development of a recycling program in a manner that is following the provisions set forth in these specifications and all Commonwealth of Virginia's environmental laws governing refuse services.

1. Bay Disposal & Recycling 90 gallons and large containers will have identification as to what type of materials the container accepts. (Trash/Recycling).
2. Bay Disposal & Recycling will switch out three existing large green containers to new large yellow containers that will be locked or contained specifically for recycling material.
3. The three large containers are placed strategically on campus and will be a pick-up location to start but as the Recycling Program grows more large containers will be added to support the recycling effort.
4. Bay Disposal & Recycling will send a separate driver every Tuesday and Friday to pick up the recyclables and process them with single stream recyclables.
5. Based on standard data Bay Disposal & Recycling will give the Director of Energy & Sustainability all approximate weights of recyclables on campus.
6. Bay Disposal & Recycling will allow the University to mix the recycled products in one transportation container. For instance, all office paper, newspaper, aluminum cans, etc. is stored in one yellow contained container.
7. Bay Disposal & Recycling shall provide frequency of collection and volume of recycled material collected.

8. Bay Disposal & Recycling shall provide a report to include, but not limited to, the total tonnage of recycled materials monthly to create a recycling rate for the Director of Energy & Sustainability - Recycling Program.

**B. Commonwealth Document Management (CDM)**

Commonwealth Document Management (CDM) is a NAID (National Association of Information Destruction) certified, secure document shredding company.

1. CDM proposes adding a shredding service to any building or department that currently does not have a shredding service.
2. CDM will provide a secured document container that is locked in the collection of secure documents.
3. CDM will also schedule large shredding purges for any department needing to clean out a larger amount than what is normally picked up.
4. All documents will be shredded onsite before CDM leaves the premises.
5. This is a secure process to ensure that all sensitive documents are destroyed.
6. All secured documents considered 10 years or older can be shredded,
7. Once everything is shredded, CDM recycles 100% of the shredded paper.
8. CDM will provide monthly reports to the Director of Energy & Sustainability outlining the volume of paper to create a recycling rate that has been shredded and recycled for each service.

**4.2. Responsibilities**

Facilities Management - Department of Energy & Sustainability and is responsible for the implementation of the Norfolk State University Recycling Program.

1. The Facilities Management - Director of Buildings and Grounds has the overall responsibility for trash and recyclable materials collection outside and inside of buildings.
2. A recycling committee consisting of NSU faculty, staff, and students from all departments to monitor, encourage, and reinforce the Norfolk State University Recycling Plan for their designated areas.
3. The entire campus community is expected to actively participate in Norfolk State University Recycling Program and waste reduction efforts but at present it is a voluntary opportunity to participate in the recycling of materials.
4. Reducing the consumption of paper and other office supplies and encouraging the use of electronic transactions and publications.
5. Reduce the use of disposable materials and use only compostable or recyclable materials if available.
6. Recycle paper (white, mixed, cardboard, other), plastic, batteries, printer cartridges, aluminum, glass, tin/steel cans, and other related items.
7. Recycle electronic waste (computers, monitors, fax machines, etc.).
8. Recycle fluorescent lamps, and ballasts.
9. New copiers, faxes, printers, and other such office equipment purchased or leased that use paper shall be recycled-paper compatible.
10. Purchase only recycled paper except where equipment limitations or the nature of the document preclude the use of recycled paper.

11. Collaborate with a third-party vendor Big Belly to implement new recycling bins throughout the campus.
12. A map with the recycling containers on campus will be developed by the department of Energy& Sustainability.
13. As much as practical, purchase materials and supplies with a minimum of packaging.
14. Encourage composting and food diversion programs.
15. Encourage the procurement of alternatives to, with the intent to phase out, plastic individual-serving-sized containers for use during normal operations. Plastic individual-serving-sized containers may be used in emergencies, or for safety or health reasons.
16. Durable products should be reused rather than disposed of whenever practical.
17. The Department of Energy & Sustainability will be responsible for preparing and submitting an annual recycling rate report to the Commonwealth of Virginia Department of Environmental Quality. The report is for the previous calendar year (January 1 to December 31).

## 5. Recycling Goals

Norfolk State University goal is to achieve a 30% recycling rate by 2030.Reduce landfill bound waste to 30 percent of total campus waste by 2030. Divert at least 50 percent from landfill by 2040 and move toward zero waste. Successful implementation of a Single Stream Recycling System will help improve collection efficiency and reduce collection costs. We will continually revise and maintain the Norfolk State University Recycling Guide and Plan.

## 6. Reoccurring Special Events

Norfolk State University Continue to promote Zero-Waste events on campus to include Earth Day Recycling events in April. Norfolk State University will provide recycling training presentation for incoming first-year students at the beginning of the Fall semester in August and Spring Semester in January. Yearly Shredding events performed by CDM will supply a shredding truck for a campus wide Shred Event two times a year in April and October as Norfolk State University continues to explore opportunities to participate in Special Event e-waste program

## 7. Recycling Education and Outreach

Communication and discipline are essential to having a consistent recycling program. The use of banners, handouts, e-mails, and posted information would help to show the importance of recycling.

Bay Disposal and Recycling along with CDM will provide training material and assist faculty, staff, student, and community with training that outlines the proper way to manage sensitive information and what to and what not to recycle.

A yearly recycling presentation will be offered to faculty, staff, student, and community to ensure the process and procedures on how to properly recycle successfully at Norfolk State University.

During every orientation, a recycling presentation will be presented to inform incoming or transfer students how to properly recycle successfully at Norfolk State University.

## 8. Recycling Rate Report

The Commonwealth of Virginia Department of Environmental Quality requires each region of the state to prepare and submit an annual recycling rate report. The report is for the previous calendar year (January 1 to December 31). Norfolk State University will use the DEQ format to calculate our base recycling rate, our waste diversion rate, and our final recycling rate.

## 9. Long Term Goals

Norfolk State University long-term goal for the development of a comprehensive strategy is to become a Zero Waste Campus thereby, further reducing waste streams in all campus units. The industry definition of Zero-Waste is keeping 90% or more of our generated waste out of the landfill.

## 10. Conclusion

Continuous improvement in managing waste on our Norfolk State University campus is a priority for the Department of Energy & Sustainability – Recycling Program. Great strides will be made to remove waste and recycling from our campus in an efficient, economic and an environmentally conscience manner.

Norfolk State University aspires to be the best steward and make available the best methods for disposal of all waste materials without compromising the environment. An evaluation will be completed to determine waste and recycling initiatives for the coming year, along with action items and responsible personnel to perform the tasks needed to achieve approved goals and objectives.

Future revisions will support the Energy & Sustainability Strategic Plan and serve as the necessary documentation for the Sustainability Tracking, Assessment and Rating System (STARS) Rating, the Department of Environmental Quality Annual Recycling Rate Report.

## 11. Website Links to Additional Information and Resources

**Bay Disposal and Recycling -** **https://www.baydisposal.com/**

**Commonwealth Document Management –**
**https://www.commonwealthdocumentmanagement.com/**

**Norfolk State University Facilities Management -**
**https://www.nsu.edu/About/Administrative-Offices-Services/Facilities-Management**

**Sustainability Tracking, Assessment & Rating System™ (STARS)**
**https://stars.aashe.org/**

**Recycling Reports | Virginia DEQ -** https://www.deq.virginia.gov/our-programs/landwaste/recycling/recycling-data/recycling-rate-report

# 12. Appendix

## 12.1 Glossary

**Baler:** equipment used to bind a compacted cube or block of recyclable material, such as cardboard

**Bin:** a small waste collection container used to hold limited quantities of waste, such as compostables, recycling, and landfill waste, before it is transported to a larger disposal container, such as a dumpster

**Carbon Footprint:** a measure of the impact human activities has on the environment based on carbon outputs.

**Commingled Container:** a single waste container used to house a blended collection of some or all of the following material categories: paper, aluminum, steel, glass, and plastic

**Compactor:** a type of equipment that uses pressure to compress recyclable materials into a dense mass

**Contamination of Recyclables:** Contamination is described as any fluid or other substance that constitutes more than 5% residue. Contaminated recyclables include food containers with scrap food, grease, ketchup, mustard, sauces, and other materials that make the product unsuitable for recycling.

**Corrugated Box Recycling:** Corrugated box recycling includes paper-based material, commonly used as shipping containers, which consist of fluted corrugated sheets and one or more flat linerboards.

**Dumpster:** a large waste collection container designed to be lifted and emptied into a garbage or recycling truck.

**End User:** the consumer of products for the purpose of recycling, excluding products for re-use or combustion for energy recovery.

**Front Load Dumpster:** a mid-size waste collection container that is emptied via prongs on the front of a waste collection truck, lifting the container up and over the front of the truck to be dumped upside down in the open back of the truck.

**Gaylord**: a large, reusable corrugated container – commonly referred to as a cardboard box – used for transporting materials such as hazardous or universal waste.

**Glass Recycling:** Glass recycling includes glass-based material that is clear, brown, or green. It does not include any blue glass products. MCC will collect glass products in a specific location on campus since they are not accepted as single stream items in the recycling dumpster program.

**Lockbar:** a locking system used on dumpsters to keep the dumpster lid closed for the purpose of preventing rainwater entry and to keep unauthorized users from discarding waste into the container.

**Metal Recycling:** Metal recycling is the process of recovering waste metal products to make these materials into new metal products. The amount of energy needed to recycle metals is significantly less than that needed to extract the same material from earth. Metal recycling on campus includes the following products: aluminum cans, steel cans, steel products, and other miscellaneous metal goods.

**Paper Recycling:** Paper recycling is the process of recovering wastepaper and making it into new paper products. This includes white printer paper, newspaper, colored paper, cardboard paper, shredded paper, telephone directories, magazines, textbooks, light cardboard products, junk mail, envelopes with windows, stapled paper, and other types of mixed paper goods. Paper recycling does not include carbon-copy paper.

**Plastic Recycling:** Plastic recycling is the process of recovering waste plastic products to make them into new plastic products. The amount of energy needed to recycle plastic is significantly less than that needed to make new plastic materials.
**Product:** Product is a material that can still be used for its intended purpose.

**Recycling:** Recycling is defined as sorting, collecting, and processing materials to manufacture and sell them as new products. The College will participate in recycling the products described as follows.

**Roll-off** or **Open Top:** a large waste collection container designed for industrial businesses or temporary projects like landscaping work or construction. Unlike front load containers, trucks can only haul one roll-off at a time.

**Single Stream Recycling:** Single Stream recycling allows customers and residents to throw plastic, aluminum, tin, paper, and glass recyclables in one recycling container. No sorting is needed. When recycling is easier, overall participation rates are higher.

**Source Reduction:** Source reduction or waste prevention is defined as the process of minimizing waste volume to reduce the amount and toxicity of what is thrown away. This includes the practice of purchasing or using materials (such as products and packaging) in ways that reduce the amount or toxicity of trash created. For example, reusing material delays an item's entry into the waste collection and disposal system. Waste is material that can no longer be used for its intended purpose.

**STARS:** Sustainability Tracking, Assessment & Rating System used to measure the university's sustainability performance.
**Tote** or **Roll Cart:** a cart on wheels used to collect waste and recyclables. The wheels are used to facilitate transportation to the curbside or to the hauling truck; also known as a rear load container

**Universal Waste:** A type of waste which may potentially contain hazardous materials including, but not limited to, lead, mercury, cadmium, and copper. (Examples include batteries, computer monitors and other e-waste, fluorescent lamps, and light ballasts.)

**Waste Diversion:** the act of preventing waste from being disposed into landfills and incinerators.

**Waste Reduction** or **Minimization:** recycling and other efforts to reduce the amount of waste going into the waste stream by redesigning products or patterns of production or consumption.

**Zero Waste:** designing and managing products and processes to reduce the volume of waste and conserve or recover all resources, so that 90 percent or more of an organization's waste stream is diverted from landfills or incinerators. Achieving a Zero Waste goal successfully eliminates 90 percent of discharges to land, water or air that may be a threat to planetary, human, animal, or plant health.

### **12.2** Recycling Rate Calculation

DEQ uses the data submitted annually by solid waste planning units to calculate the overall state recycling rate. The calculation required by regulation divides the total amount of material recycled by the total amount of solid waste generated (sum of material recycled and MSW disposed) rates up to 5 percent of the annual recycling rate are also available.

### **12.3 Recycling** Data Submission Deadline

Solid Waste Planning Units with populations greater than or equal to 100,000 people are required to submit their recycling rate data annually. This report is due on or before April 30 each year for recycling activities conducted in the preceding year.