Authority and Purpose
This document meets the requirements outlined in 40 CFR Part 273 (EPA Standards Applicable to Generators of Hazardous Waste), and 38 MRSA Chapter 850 et seq (Maine DEP Universal Waste Handbook), for the development, implementation and maintenance of a written universal waste management plan (UWMP; the Plan) by Large Quantity Generators (LQG).

The purpose of the UWMP is to provide information to the employees of Bowdoin College regarding the identification, handling, storage, and disposal of universal wastes generated in the workplace.

Scope
The UWMP applies to all employees of Bowdoin College (including part-time employees, student employees, and subcontractors working onsite) who generate and/or handle universal wastes in the course of their work.

Program Components
The UWMP consists of the following components:

1. Generator Status. Bowdoin College is classified both as a Large Universal Waste Generator (LUWG) because it generates on the average more than 200 items of universal waste in a given month, and a Central Accumulation Facility (CAF) because it consolidates its own universal wastes for offsite disposal.

2. Assignment of Responsibility. Each impacted Department or Group will designate at least one Responsible Person to oversee the implementation of the UWMP for their particular operations, specifically:
   - Managing the collection, containment and labeling of identified wastes;
   - Maintenance of the workplace satellite accumulation area, including signage and weekly inspection logs;
   - Arranging for container transfers to the central accumulation area; and
   - Participating in the annual Plan review.

A list of designated Responsible Persons per Department or Group is included in the UWMP Summary, and will be updated at least annually during the periodic review of the Plan.

The Manager of Environmental Health and Safety (EHS) will act as Universal Waste Coordinator (UWC) for the College, in cooperation with the Director of Facility Operations. The UWC will be responsible for:
   - Monitoring the status of the satellite and central accumulation areas through the weekly inspection logs;
   - Logging satellite containers into the central accumulation area;
   - Arranging offsite disposal by a licensed vendor;
   - Maintaining records of inspections/inventories, training, manifests, certificates of recycling, and annual reports; and
   - Providing guidance, materials, and training to impacted employees.

3. Universal Waste Determination. Hazardous wastes within the following categories are considered "universal wastes" and will be managed accordingly:
• Fluorescent Lamps (H), including those containing neon, mercury vapor, sodium, and metal halides.
• Cathode Ray Tubes and Television Monitors (CR).
• Batteries (BT) containing lithium, mercury, silver, nickel-cadmium, metallic hydrides, or zinc, and commercial lead-acid batteries; alkaline batteries are exempt, and may directly recycled.
• PCB Ballasts (PCB), if totally enclosed and non-leaking; otherwise will be disposed as hazardous waste.
• Mercury Devices (MD) such as thermometers, manometers, sphygmameters, and non-automotive switches; automotive Switches (MS); and Thermostats (TH). Mercury spill residues will be disposed as hazardous wastes.

4. Satellite and Central Accumulation Areas. Storage areas will be managed as follows:

• Satellite (SAA) and central (CAA) accumulation areas will be secured and locked, and demarcated as such with clearly visible generic (“Universal Waste Satellite Accumulation Area”) or specific (“Waste Lamp Storage”) signs, as provided by the UWC. The storage areas will be dry, out of the weather, and allow enough room for safe and proper handling of containers.

• Waste containers will be structurally sound, compatible with the waste, packed to prevent breakage, and kept closed. The containers will be stored on an impervious surface in an appropriate location to prevent reaction or physical damage (due to water seepage, impact, etc.), not stacked more than 5-feet high, and so as to allow ready inspection of both the physical condition and of the label. Secondary containment precautions will be provided if necessary.

• Individual containers will be labeled with the type of waste, the date the container began being used for storage (“start date”), the date when it became full, and the date of receipt at the CAA; labels will be provided by the UWC. Loose items delivered to the CAA may be stored for up to one year or until the container is full, with the first receipt date acting as the start date.

• The SAAs and CAA will be inspected weekly by trained personnel for physical condition of the container(s), signs of a release, and the presence of full or past-date containers. Inspections will be logged on the forms provided, and the forms kept in or immediately adjacent to the storage location. Evidence of a release will be reported to the area Supervisor and UWC immediately, and managed according to the spill cleanup procedures outlined below.

• Full containers, or those approaching 365-days from the start date, will be transferred within 72-hours from the SAA to the CAA at Facilities Management for disposal on a 90-day schedule. Containers will be properly labeled and sealed prior to transfer, and will not leave the campus except under manifest by a licensed transporter. Upon arrival, the containers will be logged in by the UWC or designee on the form provided, and labeled with the date of receipt. The manifest number for each shipment of containers will be entered on the inventory log form for those containers when completed.

A list of designated storage areas is included in the UWMP Summary. Sample signs and log forms are attached for copying.
5. **Manifesting and Transportation Requirements.** Shipments will be managed by a licensed vendor as follows:

- Wastes will be whole, intact and unbroken (unless residue from a cleanup); segregated by type; and properly packaged and labeled for transport according to DOT 49 CFR 171-180 guidelines.

- Wastes will be documented for transport using a uniform hazardous waste manifest (UHWM), Universal Bill of Lading (UBOL), or other format acceptable to the DEP.

6. **Recordkeeping and Reporting.**

- Original manifests will be provided by the vendor to the UWC, who will submit the appropriate copies to the DEP within 7 days of the ship date.

- “Certificates of Recycling” will be returned to the UWC by the handling facility within 35-days of receipt, and will be formatted according to DEP guidelines.

- Quarterly reports will be submitted to the DEP by the 30th of each January, April, July, and October for the previous quarter, either by the generator or the disposal vendor, using the inventory summary format provided.

- Universal waste reporting for the previous calendar year will be made to the DEP by March 1 annually (or when so specified by the DEP in its annual generator letter) by the UWC, using the manifest summary format provided.

- Records of storage inspections/inventories, employee training, shipping manifests, and certificates of recycling will be maintained at the facility by the UWC for at least 3 years.

7. **Emergency Procedures.** Evidence of a release of universal wastes will be managed as follows:

- Incidental breakage of ten or fewer lamps or CRTs may still be handled as universal waste, and should be managed according to the following spill cleanup procedures:
  1. Contact the Supervisor or Responsible Person in charge of the storage area, and report the spill.
  2. Wear disposable personal protective equipment, including appropriate gloves and safety glasses.
  3. Use tape to clean up small particles, and wash the area thoroughly when all solids have been recovered. If the spill occurred on a carpet or other permeable surface either professional cleaning or removal of the flooring will be conducted.
  4. All items impacted by or used to clean up the spill (broom, sponge, dustpan, etc.) become waste, and will be disposed with the recovered materials.
  5. Place all recovered materials and items in an appropriate container, seal it, label for type of universal waste and spill date, and store properly in the CAA.

- Breakage of ten or more lamps or CRTs, or any release from batteries, mercury devices, or PCB ballasts, constitute a reportable condition; the EHS Manager will be notified, and the DEP Spill Hotline (1-800-452-4664) will be contacted. Materials recovered from a reportable spill must be disposed as a hazardous waste.
• Special precautions for mercury spills include the following:

1. Secure the area of the spill from all traffic, and increase ventilation to maximum capacity.
2. Avoid all skin contact; wash thoroughly if contaminated, and seek medical attention.
3. Do NOT use a vacuum to clean up the debris, unless it is a unit specifically designed for environmental use that may be decontaminated and have the filter removed for disposal.
4. Use a “mercury spill kit” if available for small spills; significant liquid spills will be managed by a licensed vendor.

• The intentional breaking of spent lamps or CRTs prior to disposal is considered a form of on-site treatment, and is prohibited.

8. Employee Information and Training. Employees who handle or who have responsibility for managing universal wastes shall receive initial and annual training specific to their work areas, including at least the following:

• The provisions of the federal and state regulations;
• The location and availability of the written UWMP;
• Universal waste determination;
• Onsite waste storage and labeling procedures;
• Manifesting, packaging, and shipping;
• Recordkeeping and reporting;
• Emergency procedures.

Training will be conducted by the UWC, and may include written, video, or web-based materials, so long as it meets the minimum requirements listed and addresses the specific conditions of each workplace. Employees to be trained will include the Responsible Person(s) representing each Department or Group, and other persons so designated by the UWC within that Department or Group (see UWMP Summary). Information included in the training is summarized in the attached Guidelines for Universal Waste Handling.

9. Program Review

The UWMP will be reviewed at least annually by the EHS Manager and the UWC, and updated as needed to maintain regulatory compliance and meet the perceived needs of the College’s workplaces.

Attachments: Guidelines for Universal Waste Handling
UWMP Summary
Waste Lamps Sign
UW SAA Inspection Log
UW CAA Sign
UW CAA Inspection Log
UW CAA Inventory Log
Battery Recycling/Disposal Policy
Battery Charging and Storage Area Signs