Title: Comprehensive Environmental Program

I. Purpose

Creighton University establishes this policy to identify general goals and strategies for a commitment to environmental responsibility. Through enacting and implementing the vision of this policy, Creighton University will be a positive example and play a part in the advancement of environmental stewardship on the campus and in the local community.

II. Scope

This policy and procedure pertains to all students, staff, faculty and administration of the University.

III. Policy

To maintain the campus effectively while also working to preserve the rights of future generations, the University affirms its commitment to environmental excellence and to actively promote the right to a healthy, quality environment.

Creighton University will work toward the goal of balancing fiscal and environmental responsibility in making decisions and in general University practices. The university acknowledges its role and responsibility to provide educational, social, and financial leadership to achieve the goals of the policy.

IV. Goals and Strategies

A. Commitment to Environmental Education.

The University recognizes ongoing education for all members of the University Community about the importance of environmental responsibility and the provisions of the Comprehensive Environmental Program.

1. The University commits to assuring that the University Community is aware of the Comprehensive Environmental Program and understands its roles in the Plan's implementation.
2. The University recognizes its academic role in fostering leadership by educating the University Community about environmental responsibility.

B. Environmentally Responsible Purchasing Policies.

The university recognizes that one of the primary methods of exercising its commitment to environmental responsibility is through its purchasing choices. The university will strive to obtain maximum value for its expenditures and will work towards obtaining the "best value" by balancing short and long-term costs, maintenance, life cycle, and environmental costs in purchasing goods and services.

1. The University acknowledges that environmentally responsible purchasing choices will help create and sustain markets for environmentally responsible product offerings and products containing recycled materials.

2. The University commits to the goal of making environmentally and fiscally responsible purchasing choices that consider life cycle costs, long-term implications, and relative environmental harm of products.
3. Purchasing policies will encourage obtaining products that minimize waste production, have high-recycled content, use environmental production methods, demonstrate maximum durability or biodegradability, reparability, energy-efficiency, non-toxicity, and recycleablility

C. **Efficient Use and Conservation of Energy, Water and Other Resources.**
The university recognizes the importance of conservation efforts and efficient use of resources as the primary method to be used to reduce resource consumption.

1. The University commits to minimizing the consumption of energy, water, and other resources by eliminating wasteful practices and promoting efficient use.
2. The University strives to maximize energy efficiency in existing buildings, renovations, and new construction.
3. The University commits to exploring and implementing well-considered and feasible conservation measures in existing buildings, renovations, and new construction.
4. The university will explore the application of developing technologies for energy systems and use of resources, as well as the potential use of renewable energy resources.

D. **Minimize Solid Waste Production.**
The university recognizes the importance of minimizing solid waste generation by the community. The University will establish policies and processes that will reduce solid waste generation; first through reduction, secondarily through reuse, and finally through recycling.

1. The University commits to waste source reduction, especially at the point of purchase.
2. The university supports reuse of materials to maximize fiscal, environmental, and energy efficiency.
3. The university commits to a comprehensive recycling program as the final step in solid waste reduction and as a means to transform waste into a resource.

E. **Minimize Hazardous Waste and Toxic materials on Campus.**
The university acknowledges the importance of safe management of hazardous and toxic materials and will continue to establish policies and processes to maintain efficient use, tracking, storage and disposal of hazardous and toxic materials.

1. The University commits to keeping the presence of toxic material on campus and the generation of hazardous waste within the University community at reasonable levels for work and research on campus.
2. The University supports environmentally responsible disposal of hazardous waste.
3. The University commits to keeping the presence of radioactive materials used on campus at reasonable levels as needed for research. It supports environmentally responsible disposal of radioactive waste from within the University Community.

F. **Environmentally Responsible Campus Design and Planning Principles.** The University recognizes the importance of environmentally responsible practices in developing the physical characteristics of its community. The university will consider environmental implications in the development, construction and operation of campus infrastructure, grounds, and buildings.

1. The University will strive to balance sound fiscal practices and environmental responsibility in the maintenance and further development of the planning and building of campus facilities.
2. The University will work toward the goals of providing landscaping and grounds maintenance practices that use vegetation compatible with the local environment and that use integrated pest management techniques.
3. The university has an ongoing commitment to facilitating pedestrian travel, bicycle use, and other modes of transportation that minimize environmental impact.

V. Definitions

A. ***Battery*** means a device consisting of one or more electrically connected electrochemical cells, which is designed to receive, store and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed. It does not include electrical generators but only includes devices that can store electrical power.

B. ***Code of Federal Regulations*** **(CFR)**

C. ***Destination facility*** means a facility that treats, disposes of, or recycles a particular category of universal waste. A facility at which a particular category of universal waste is only accumulated is not a destination facility for purposes of managing that category of universal waste.

D. ***Environmental Protection Agency*** **(EPA)**

E. ***Generator*** means any person, by site; whose act or process procedure hazardous waste or whose act first causes a hazardous waste to become subject to regulation.

F. ***Large Quantity Handler of Universal Waste*** means a universal waste handler who accumulates 5,000 kilograms or more total of universal waste at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated.

G. ***On-site*** means the same or geographically contiguous property, which may be divided by public or private right-of-way, if the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way.

H. ***Pesticide*** means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant. It does not include new animal drugs or feeds that contain animal drugs.

I. ***Recycled*** means a material is used, reused, or reclaimed.

J. ***RCRA Empty –*** while the aerosol can may have all its contents removed using practices commonly employed to remove materials from that type of container, the generator must demonstrate that the aerosol can also have no more than one inch of residue or no more than 3% by weight of the total capacity remaining.

K. ***Resource Conservation and Recovery Act (RCRA)***

L. ***Small Quantity Handler of Universal Waste*** means a universal waste handler who does not accumulate more than 5,000 kilograms total of universal waste, on the contiguous property of the facility, at any time.

M. ***Thermostat*** means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these devices.

N. ***Universal Waste –*** in April of 1995, the first "Universal Waste" rule was issued by the EPA and codified in 40 CFR part 273. The rule currently applies to catteries, pesticides, thermostats, and fluorescent lamps. The main focus of the rule is to provide generators of these hazardous wastes more freedom in transporting, collecting, and handling wastes. The Universal Waste Rule encourages recycling by streamlining the requirements related to notification, labeling, marking, prohibitions, accumulation time limits, employee training, responses to releases, offsite shipments, tracking, exports, and transportation.

O. ***Universal Waste Handler*** means the owner or operator of a facility that generates or receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler or to a destination facility. It does not include the treatment, disposal, recycling or transportation of universal waste.

P. ***Universal Waste Transfer Facility*** means any transportation-related facility where shipments of universal waste are held during the formal course of transportation for ten days or less.

Q. ***Universal Waste Transporter*** means a person engaged in the off-site transportation of universal waste by air, highway, or water under the requirements of this part.

VI. Aerosol Can Collection

A. Is the empty aerosol can empty and is it a hazardous waste?

1. Empty spray cans aren't really empty most of the time. Even when they don't spray anymore, they still contain a small amount of liquid in the bottom.
2. Aerosol cans are not hazardous waste due *solely* to the substance they *once* contained.
3. The empty aerosol can itself is usually considered hazardous waste because it exhibits the characteristic of reactivity. It can be capable of detonation or explosive reaction if is subject to a strong initiation source or it is heated under confinement.

B. Therefore, ***all*** unwanted aerosol cans must be disposed via University Waste Management (UWM). They must NOT be thrown in the garbage. This includes everything that comes in an aerosol can, (e.g., paints, hairspray, deodorizer, contact cleaner, vegetable oil, etc.)

C. Once picked up, UWM will determine that the container is RCRA empty (no significant amount of liquid)

D. Following these simple rules will ensure compliance with applicable regulations:

1. Do not discard aerosol cans in the garbage, even when they appear to be empty of propellant.
2. If you use a lot of aerosol cans, contact UWM so that we can set you up with a collection drum in your immediate work area.
3. If you only use a few aerosol cans, you can place your unwanted aerosol cans in a common-use drum supplied for your building. If you so not know the specific location of the common-use drum for your building, contact UWM.
4. The aerosol collection container/drum will be labeled as "Aerosol Cans."
5. Ensure that the lid on the collection drum remains closed at all times.
6. UWM will check the collection container/drum once a week. UWM will collect the cans and take them for recycling.
7. Should your container/drum become full between cycles contact UWM immediately so it can be picked up.
8. Whenever possible, avoid using products that come in aerosol cans. If you can avoid the use of aerosol cans, the University can avoid some costly regulatory requirements.

E. UWM Disposal Procedures

1. Punctured (and empty) aerosol cans may be disposed of in the trash. This applies to hazardous waste generators of all sizes. This does not apply to aerosol cans that contained acutely hazardous waste (P-listed).
2. Aerosol Can Puncturing

VII. Electronic Recycling

A. General Information

1. Electronic waste is unwanted computers, monitors, televisions, audio equipment, printers, and other electronic devices.
2. Besides taking up space in empty cubicles and storerooms, end-of-life electronics pose several issues regarding proper disposal and potential environmental consequences.
3. Discarded electronics contain hazardous or toxic substances. Some electronic products (notably those with cathode ray tubes or CRTs, circuit boards, batteries, and mercury switches) contain hazardous or toxic materials such as lead, mercury, cadmium, chromium, and some types of flame-retardants, and do so in amounts that may cause them to test hazardous under federal law.
4. In particular, the glass screens, or CRTs, in computer monitors and televisions can contain as much as 27% lead.
5. *Donations are an alternative:* Be aware that organizations that accept donations want newer technology. If your computer donation is not relatively new and in good working order, you are simply passing on the cost of recycling to organizations that have more important uses for their money.

B. Procedure

1. Contact the Technology Buyer in Purchasing first at 280-3043 to evaluate if the items can be reused or should be disposed of.

2. Once this determination has been made us the online form to schedule pick-up of the items with University Moving Services (UMS).
3. If the items are to be disposed of the University has an agreement with a local electronic recycler to dispose of them properly. There is a cost to the University for this service. Currently all monitors will be charged at $8 each. All other materials (i.e. CPU's, keyboards, printers etc.) will be charged at 20¢ per pound.

VIII. Universal Waste

A. University Responsibilities

1. Labeling

The universal waste or the container in which the universal waste is placed in must be labeled or marked clearly with the words Universal Waste—Batteries, Universal Waste—Pesticides, or Universal Waste—Mercury Thermostats as appropriate.

2. Accumulation Time Limits

a. A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler. It is permissible to accumulate waste longer than one year from the date the universal waste is generated if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.

b. However, the generator bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment or disposal. The handler must be able to demonstrate the length of time that the universal waste has been accumulated from the date it became a waste. This may be done by labeling each individual item with the date it became a waste, labeling the container with the earliest date that any waste was placed in the container, maintaining an inventory system that identifies the date each universal waste became waste. Maintaining an inventory system on-site that identifies the earliest date a group of containers of universal waste became waste, or any other method that clearly demonstrates the length of time that the universal waste has been accumulated.

c. Facilities that mix universal wastes with regular trash must manage the commingled waste as universal waste or regular hazardous waste.

B. Employee Training

1. All employees who handle or have responsibility for managing waste will be informed of procedures for proper handling and emergency procedures appropriate to the types of universal waste handled at the facility.

C. Spills

1. The handler must immediately contain all releases of universal wastes and other residues from universal wastes. It must be determined whether any material resulting from the release is hazardous waste, and if so, it must

manage the hazardous waste in compliance with the regular hazardous waste regulations.

D. **Shipments**

1. A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler or a destination facility.
2. If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter and must comply with the transporter requirements and DOT regulations.
3. If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49CFR parts 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable DOT regulations under 49 CFR [parts 171 through 180].
4. For purposes of the DOT regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40CFR 262, they may not be described by the DOT proper shipping name "hazardous waste, (liquid) or (solid), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste."
6. Before shipping universal waste to another universal waste handler you must ensure that the receiving handler agrees to accept the shipment.
7. It the receiving handler or destination facility rejects the shipment, the originating handler must either receive the waste back or agree with the receiving handler on a new facility to which the shipment will be sent.
8. A small quantity handler of universal waste may reject a shipment containing universal waste, or apportion of a shipment containing universal waste that he has received from another handler. If a receiving handler rejects a shipment or a portion of a shipment, he must contact the originating handle to notify him of the rejection and to discuss reshipment of the load. They must agree to either send the shipment back to the originating handler or send the shipment to a new destination facility.
9. If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the appropriate regional EPA office of the illegal shipment, and provide the name, address and phone number of the originating shipper. The EPA regional office will provide instructions for managing the hazardous waste.

E. **Tracking Shipments**

1. A small quantity handler of universal waste is not required to keep records of shipments of universal waste. The EPA assumes that the regular business documents used as part of the shipment will be sufficient to show that the material was managed correctly.

F. **Batteries**

1. Batteries such as nickel-cadmium (Ni-Cd) and small sealed lead-acid batteries, which are found in many common items in the University setting, cannot be placed in the trash. Some examples of these items include electronic equipment, cellular telephones, pagers, laptop computers, smoke detectors, calculators, etc.
2. A used battery becomes a waste on the date it is discarded (*e.g.* when sent for reclamation) and an unused battery becomes a waste on the date the handler decides to discard it.
3. Batteries must be disposed of in a way that prevents releases of any universal waste or component of a universal waste to the environment. Batteries that show evidence of leakage or damage must be stored in containers that are closed, structurally sound, and compatible with the contents of the battery.
4. As long as the casing of each individual battery cell is not breached and remains intact and closed, small quantity handlers of universal waste may conduct the following activities:
    a. Sorting batteries by type;
    b. Mixing battery types in one container;
    c. Discharging batteries so as to remove the electric charge;
    d. Regenerating used batteries
    e. Disassembling batteries or battery packs into individual batteries or cells;
    f. Removing batteries from consumer products; or
    g. Removing electrolyte from batteries
5. Anyone who removes electrolyte from batteries or who generates other waste associated with batteries (*e.g.* battery pack materials, discarded consumer products) must determine if this material is a regular hazardous waste.
6. If the electrolyte and/or other solid waste are a hazardous waste, it is subject to all applicable requirements of regular hazardous waste. The handler is considered generator of hazardous waste and must comply with all of the generator requirements. This includes EPA notification and strict limits on storage. If the electrolyte or other solid waste is not a hazardous waste, you may dispose of the material in a solid waste landfill.

G. **Pesticides**

1. Pesticides are generally managed under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Waste pesticides are usually generated due to a federal recall or from citizens cleaning out the garage. Universal waste pesticides include both recalled pesticide stocks of a suspended and cancelled pesticide that are part of a voluntary or mandatory recall and unused pesticide products that are collected and managed as part of a waste pesticide collection program. Pesticides that are managed, in a accordance with the disposal instructions on the label, on a working farm are exempt from the universal waste regulations.

2. Labeling – The container must be labeled with original label and the wording Universal Waste Pesticide(s). If the original label is not legible it must be labeled in accordance with either DOT requirements or have a label officially recognized by the state as part of a pesticide collection program.

H. **Thermostats**

1. A small quantity handler of universal waste must manage mercury thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment
2. A small quantity handler of universal waste must contain any thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound and compatible with the contents of the thermostat.
3. Ampules containing mercury may be removed from thermostats provided:
    a. The ampules in a manner to prevent breakage of the ampules;
    b. Ampules are only removed over a tray or pan sufficient to collect and contain any mercury released in case of breakage;
    c. A mercury clean-up system is readily available;
    d. Spills or leaks from broken ampules are immediately cleaned up and placed into a proper container;
    e. The area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable exposure levels for mercury;
    f. Employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
    g. Removed ampules are stored in closed, non-leaking containers that are in good condition;
    h. Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation; and
    i. Determine whether any solid waste generated as a result of the removal of mercury-containing ampules or clean-up residues is characteristic of hazardous waste. If it is it must be managed in accordance with the regular hazardous waste regulations.

I. **Mercury-containing lamps**

1. Universal waste mercury-containing lamps or containers that contain waste lamps must be labeled or clearly marked with one of the following phrases: “Universal Waste – Mercury-Containing Lamps”, “Waste Mercury-Containing Lamps” or “Used Mercury-Containing Lamps”