A. PURPOSE
The purpose of the Alvernia University Recycling Program is to reduce the amount of waste that would otherwise end up in a landfill in a cost-effective, environmentally safe, reliable and efficient manner.

B. GENERAL INFORMATION
Pennsylvania’s Municipal Waste Planning, Recycling and Waste Reduction Act (Act 101 of 1988) requires commercial, institutional and municipal establishments located in Pennsylvania’s mandated municipalities to recycle high-grade office paper, corrugated paper, aluminum and leaf waste. In addition, establishments must recycle any other materials included in the municipality’s recycling ordinance or regulations, which may include glass, newsprint, plastics, and/or steel and bimetallic cans.

The goals of the Act are to reduce Pennsylvania’s municipal waste generation; recycle at least 25% of waste generated; procure and use recycled and recyclable materials in state governmental agencies; and educate the public as to the benefits of recycling and waste reduction. The benefits of recycling and waste reduction include reduced pollution risks; conservation of natural resources, energy and landfill space; and reduced disposal costs.

C. MATERIALS THAT CAN BE RECYCLED

- Office paper
- Corrugated paper
- Cardboard
- Aluminum cans
- Bimetal (tin) cans
- Glass (clear, green, brown)
- Newspaper / Magazines / Phone books
- Computers, Keyboards, CPU’s, Monitors, Printers
- Cell phones
- Fluorescent light bulbs / Compact fluorescent light bulbs
- Batteries (various)
- Inkjet & Laser Jet toner cartridges
- Televisions
- Appliances
- DVD players; VCR’s
- Fax machines
- Used cooking oil
- Used motor oil / oil filters
- Antifreeze / Transmission fluid
- Hydraulic oil / Gear fluid
- Brake fluid
- Plastics
- CD’s / DVD’s
- PDA’s / Smart phones / Pagers
- GPS units
- Outdated pharmaceuticals
- Brass, copper, lead
- Construction and demolition (C&D) waste
- Christmas trees
- Dehumidifiers
- Outdated fire extinguishers
- Eyeglasses
- Wooden pallets
- Plastic grocery bags
- Propane gas tanks
- Vinyl siding
- Yard waste (brush, leaves, grass clippings)
- Styrofoam
- Tires
- Used textiles (ie. clothing)
- Mattresses

Some materials can be recycled for free. Other items may cost a fee.
D. HOW AND WHAT DOES ALVERNIA UNIVERSITY RECYCLE

1. Office paper
   Office paper is collected in labeled bins around campus. The bins are emptied and the recyclables are comingled in a dedicated Waste Management of PA dumpster. This dumpster is marked “Commingled Recyclables”. When full, Waste Management switches out the dumpster. At the Waste Management facility, the materials are sorted by type and weighed. A report is sent to Alvernia University. Every January per the requirements of Act 101 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, Alvernia University files a Collection Report with the City of Reading listing the tonnage of recyclable materials generated the previous year.

2. Aluminum cans
   Aluminum cans are collected in labeled bins around campus. The bins are emptied and the recyclables are comingled in a dedicated Waste Management of PA dumpster. This dumpster is marked “Commingled Recyclables”. When full, Waste Management switches out the dumpster. At the Waste Management facility, the materials are sorted by type and weighed. A report is sent to Alvernia University. Every January per the requirements of Act 101 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, Alvernia University files a Collection Report with the City of Reading listing the tonnage of recyclable materials generated the previous year.

3. Computers, Monitors, Keyboards, CPU's, Mice (e-Waste)
   These items are collected by the Alvernia University Information Technology (IT) department. Personal data is erased from the hard drives of the CPU's. A local recycler picks up the e-waste at no charge to Alvernia. The recycling company has a Zero Landfill Policy. Most of the collected computers get reused in other countries around the world.

4. Light Bulbs
   The Alvernia University Maintenance Department collects the spent light bulbs and lamps around campus. The used bulbs include straight (linear) fluorescent bulbs, compact fluorescent bulbs, U-Tubes, Circular bulbs, Metal Halide bulbs, and Sodium vapor bulbs. These items are managed per the Alvernia University Universal Waste Management Program in order to be in compliance with the Environmental Protection Agency regulations specified under 40 CFR 273 Standards for Universal Waste Management.

5. Used Batteries
   The Alvernia University Maintenance Department collects spent batteries around campus. Some of these batteries are lead acid batteries and are from the Emergency Lighting units in campus buildings. Others are from smoke detectors and other electronic devices. There are several plastic 5 gallon pails around campus for collecting used alkaline batteries. The locations of these pails are:
   - Facilities and Campus Operations Office
   - Library 2nd Floor IT Area
   - Bernardine Hall Maintenance Area
   - Francis Hall Basement (Universal Waste Accumulation Area)
There are also several Call2Recycle boxes around campus for collecting rechargeable Nickel-Cadmium (NiCd), Nickel Metal Hydride (NiMH), Lithium Ion (Li Ion), Nickel-Zinc (Ni-Zn) and Lead Acid (Pb Acid) batteries. The batteries must be rechargeable and weigh less than 11 pounds. Used cell phones (with or without batteries) can also be placed in these boxes. These boxes are located at:

- Upland Center
- O’Pake Science Center Adams Street lobby
- Administrative Services Builing (951 Morgantown Road)
- Library 2nd Floor IT Area

Call2Recycle is a program sponsored by the Rechargeable Battery Recycling Corporation (RBRC). RBRC reclaims reusable materials: nickel, iron, cadmium, lead, and cobalt from the batteries. The cell phones are recycled or refurbished and resold when possible, with a portion of the proceeds from resale of the phones benefiting select charities.

Waste batteries are managed per the Alvernia University Universal Waste Management Program in order to be in compliance with the Environmental Protection Agency regulations specified under 40 CFR 273 Standards for Universal Waste Management.

For batteries over 11 pounds or for other types of batteries not listed here, contact the Alvernia University Environmental Health & Safety Manager at 610-796-8231.

6. Used Cell Phones
Used cell phones, with or without batteries, may be placed in the Call2Recycle boxes around campus. These boxes are located at:

- Upland Center
- O’Pake Science Center Adams Street lobby
- Administrative Services Builing (951 Morgantown Road)
- Library 2nd Floor IT Area

Call2Recycle is a program sponsored by the Rechargeable Battery Recycling Corporation (RBRC). RBRC reclaims reusable materials: nickel, iron, cadmium, lead, and cobalt from the batteries. The cell phones are recycled or refurbished and resold when possible, with a portion of the proceeds from resale of the phones benefiting select charities.

7. Used Motor Oil and Oil Filters
Used motor oil and oil filters from University equipment are collected in a 55 gallon drum located in the Grounds Garage. When full, Lucas Lane, Inc. collects the drum and processes the spent filters at their farm-based facility by first crushing them into 35 to 45 lb. cubes. The cubes are then loaded into a thermal processing machine (sort of a big oven). The cubes are heated at temperatures up to 1300 degrees F over a period of 18 to 20 hrs. As the temperature is increased, the oil that wasn’t removed by crushing flows into a collection tank.

This reclaimed waste oil can be used for the fuel for the thermal processing machine. The exhaust heat will also be used to help heat air and water for the farming operation. The process produces oil free, #1 scrap steel which can then be sent to a Steel Mill or Foundry to be melted and used to produce new products.
All filters are 100% recycled and Lucas Lane, Inc. guarantees that nothing goes to the landfill.

8. **Used Cooking Oil**
   The used cooking oil that is produced by Aladdin Food Management Services, LLC is collected in 55 gallon drums. When the drums are full, an outside vendor is called to collect the used cooking oil. The cooking oil is then used as an ingredient in the manufacture of biodiesel for the vendor’s vehicles.

9. **Plastic**
   Plastic waste is collected in labeled bins around campus. The bins are emptied and the recyclables are comingled in a dedicated Waste Management of PA dumpster. This dumpster is marked “Commingled Recyclables”. When full, Waste Management switches out the dumpster. At the Waste Management facility, the materials are sorted by type and weighed. A report is sent to Alvernia University. Every January per the requirements of Act 101 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, Alvernia University files a Collection Report with the City of Reading listing the tonnage of recyclable materials generated the previous year.

10. **Glass**
    Glass waste is collected in labeled bins around campus. The bins are emptied and the recyclables are comingled in a dedicated Waste Management of PA dumpster. This dumpster is marked “Commingled Recyclables”. When full, Waste Management switches out the dumpster. At the Waste Management facility, the materials are sorted by type and weighed. A report is sent to Alvernia University. Every January per the requirements of Act 101 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, Alvernia University files a Collection Report with the City of Reading listing the tonnage of recyclable materials generated the previous year.

11. **Bimetal Cans**
    Waste bimetal cans are collected in labeled bins around campus. The bins are emptied and the recyclables are comingled in a dedicated Waste Management of PA dumpster. This dumpster is marked “Commingled Recyclables”. When full, Waste Management switches out the dumpster. At the Waste Management facility, the materials are sorted by type and weighed. A report is sent to Alvernia University. Every January per the requirements of Act 101 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, Alvernia University files a Collection Report with the City of Reading listing the tonnage of recyclable materials generated the previous year.

12. **Used Inkjet and Laser Jet Cartridges**
    Used inkjet cartridges can be placed in the labeled cardboard boxes around campus. The cartridges can then be sent back to the manufacturer for recycling. There is no fee for this. Various local stores such as Lowe’s and Best Buy also recycle inkjet cartridges at no cost to the consumer. Look for the recycling kiosks at the front of the store.

    Hewlett Packard Laser Jet cartridges can also be recycled for free. Place the old cartridge in the either the original box or the new cartridge’s box. Inside the box is a white booklet. Inside the booklet is a UPS return shipping label. Seal the box and attach the UPS label to the outside of the box. Place the box in the outgoing mail container.
Other manufacturer laser jet cartridges can be recycled for free too. If the laser jet cartridge box does not contain a return shipping label, Environmental Health & Safety (Tel: 610-796-8231) can provide a laser jet recycling box. When the box is full, seal the box and take it to Shipping & Receiving (located at 951 Morgantown Road) for UPS pickup. Postage is pre-paid by the recycling company.

E. HOW CAN FACULTY, STAFF, AND STUDENTS RECYCLE (ON AND OFF CAMPUS)

As a business, Alvernia University manages our waste according to federal, state, and local regulations. The easiest way for faculty, staff, and students on campus to recycle is to place their used batteries, aluminum cans, glass, plastics, bimetal cans, office paper, used inkjet cartridges and cell phones in the labeled bins around campus. If you are unsure about an item, contact the Facilities office at 610-796-8200 x0 or Environmental Health & Safety at 610-796-8231.

Off campus, there are many ways to recycle.

1. Appliances
   Best Buy will remove and recycle an old or obsolete appliance free of charge from a consumer’s home when a new product is purchased and delivered by Best Buy. Certain conditions apply so check with Best Buy first.

   Home Depot and GE have partnered to make recycling appliances easier. After purchasing a new refrigerator with home delivery from Home Depot, your new refrigerator will be delivered to you and your old refrigerator will be taken away to be recycled per the Environmental Protection Agency’s Responsible Appliance Disposal (RAD) program. GE is currently the only major appliance manufacturer to follow the RAD program. This is a fairly new program and is currently only being offered in 12 states in the Northeast (Pennsylvania is one of them). Contact your local Home Depot for more information.

   With the purchase of a new appliance, Lowe’s will haul away and recycle customers’ old appliances for free. Contact your local Lowe’s store for more information.

   FirstEnergy’s Pennsylvania Utilities (Met-Ed, Penelec, PennPower, West Penn Power) have contracted with JACO Environmental to provide appliance recycling services to their Pennsylvania residential customers. JACO will perform all pick up and recycling activities for this program. You will receive $50 for recycling a working refrigerator or freezer and $25 for a working air conditioner. To schedule an appointment with JACO for an appliance pick-up, call 877-270-3521. Certain requirements apply. Check out JACO’s website at https://www.jacoinc.net/weborder/rebatex.aspx?ProgramID=80 for full details.

2. Electronic Waste (e-Waste)
   The Berks County Solid Waste Authority has an electronic waste recycling center located at 1316 Hilltop Road in Leesport. The Center will take computers, monitors, laptops, keyboards, modems, printers, copiers, microwaves, stereos, television, VCRs, telephones, answering machines, fluorescent bulbs, all types of batteries, air conditions and dehumidifiers. For residents of Berks County, there is no charge to recycle these items. Businesses, including Alvernia University, will be charged $1 an item for all electronic items, $5 for TV’s less than 20 inches, $10 for TV’s larger than 21 inches, and $0.50 per
### 3. Compact Fluorescent Bulbs (CFL)

Alvernia University manages and recycles Compact Fluorescent Bulbs per the Alvernia University Universal Waste Management Program.

Outside of Alvernia, consumers can take used CFL’s to Lowe’s or Home Depot. Look for the recycling kiosks at the front of the store.

### 4. Outdated Pharmaceuticals

The Berks County Solid Waste Authority offers at least one Pharmaceutical Waste event every year. Residents of Berks County can drop off unwanted and expired prescription and non-prescription medicines.

See the Berks County SWA website at [http://www.co.berks.pa.us/Dept/SWA/Recycle/Pages/default.aspx](http://www.co.berks.pa.us/Dept/SWA/Recycle/Pages/default.aspx) for more information.

### 5. Tires

Tires can be dropped off at the Berks County Recycling Center on Hill Road in Leesport. The tires can be on or off the rim. There is a small fee per tire.

See the Berks County SWA website at [http://www.co.berks.pa.us/Dept/SWA/Recycle/Pages/default.aspx](http://www.co.berks.pa.us/Dept/SWA/Recycle/Pages/default.aspx) for more information.

### 6. Glass, Plastic, Bimetal Cans, Styrofoam, Cardboard, Newspaper, Miscellaneous Items

Office paper, Glass, Plastic, Bimetal cans, Cardboard, and newspaper are collected in labeled bins around campus. The bins are emptied and the recyclables are comingled in a dedicated Waste Management of PA dumpster. This dumpster is marked “Commingled Recyclables”. When full, Waste Management switches out the dumpster. At the Waste Management facility, the materials are sorted by type and weighed. A report is sent to Alvernia University. Every January per the requirements of Act 101 Pennsylvania Municipal Waste Planning, Recycling and Waste Reduction Act, Alvernia University files a Collection Report with the City of Reading listing the tonnage of recyclable materials generated the previous year.

Some commercial and municipal trash haulers offer recycling pickup as well as normal trash disposal. For homeowners where this service is not available, one alternate is Recycling Services, Inc. (RSI) located at 365 Elm Street in Pottstown, PA. RSI accepts a wide variety of materials for recycling. Items accepted are:

a. **PAPER**
   - Newspapers, including all inserts.
- Magazines, catalogs, mail, fax paper, wrapping paper (put with cardboard during the holidays), telephone books, paperback books, hardcover books (remove covers and put with cardboard).
- Corrugated cardboard, brown Kraft bags and paperboard.
- Business-grade white ledger paper.
- White polycoated boxes such as juice boxes, cream cheese boxes, frozen food boxes, and milk cartons. The mill WILL take the cartons with plastic pouring spouts still attached.

  Notes: Tape or staples may remain on boxes. No wax or carbon paper. No waxed cardboard.

b. GLASS
- Clean, clear glass bottles and jars with lids removed.
- Clean, brown glass bottles and jars with lids removed.
- Clean, green glass bottles and jars with lids removed.

  Notes: Pyrex, window, and mirror glass are unacceptable. Blue glass goes with green.

c. PLASTICS
- Code1 - PETE - Look for a dot on the bottom of soda and liquor bottles. Some food containers and trays are now being made from this material. All colors are accepted.
- Code2 - HDPE - Frosted (milk & water bottles) and Colored (liquid detergent, food containers). Note: empty engine oil bottles are accepted - please drain them well first.
- Code3 - PVC - Used for some types of bottles & food containers. Clear variety has a blue tint and a white crease that appears when folded and creased - used for many "bubble-pack" retail items.
- Code4 - LDPE - Used for squeezable bottles for mustard and other food products. We bale Code 2 and 4 materials together.
- Code5 - PP - This material (soft "tub grade") is also used to package a variety of food items such as yogurt. These are separated into a "bottle grade" used as containers for items like pancake syrup and a "hard cap grade" that is used for making most screw-off bottle caps.
- Code6 - PS - There is a wide variety of items made from Polystyrene, and we separate them into the following categories: Rigid Food Service - includes things like sour cream containers and crinkle cookie trays; Foam Food Service - includes styrofoam meat trays, fast food containers, coffee cups and egg cartons; Solid Packaging Material - shipping material used to crate TVs, computers, etc.; Styrofoam Packaging Peanuts - used for shipping smaller items.
- Code7 - Other - Some of this material is compatible with other Codes, but much of it is not. It is suggested that you avoid purchasing items packaged in this material.

Plastic plant trays, pots and tags can be dropped off for recycling at any Lowe's Garden Center.

Several stores recycle plastic shopping bags, including Lowe's, Redner's Warehouse Markets and Giant Food Stores. Look for the bins at the front of the store.

d. METAL
- Clean steel cans, flattened and ends removed where possible. All metal caps and lids accepted.
• Aluminum and bi-metal beverage cans.
• Clean aluminum foil, pie plates, and trays.
• Brass, copper, stainless steel, lead, steel and iron must be checked with staff first.
  
  Notes: Foil mixes such as potato chip bags and coffee bags are unacceptable.

e. **CAPS & LIDS**
• No pump-style lids.
• Screw caps go in the big box marked "Screw Caps."
• Soft lids from coffee cans, etc. go in the Code 4 bin.
• Fast food soda lids that crinkle go with Code 6.
• Plastic straws have a separate collection box.
• Plastic 6-pack connector rings have a separate box.
• Metal lids go with steel cans.
  
  Note: These can be very confusing. Please ask for help.

f. **CLEAN CLOTHING AND FABRIC**
• Clean, reasonably worn clothing and shoes (no high heels or rubber work boots).
• Old, worn out clothing, curtains, drapes, towels, sheets and fabric are recycled into new cloth. Notes: All must be clean, dry, and bagged.

g. **MISCELLANEOUS**
• Batteries (silver oxide, mercury, nickel cadmium), no automotive batteries.
• Tires, inner tubes, fan belts, and rubber hoses (a per-tire charge is necessary, variable according to the size of the tire).
• Eye glasses. No broken lenses.
• Tyvek envelopes.
• Phonograph records, tapes, CDs, and old floppy disks (videos are collected for reuse).
• Candles.
• Fishing line.
• Silverware.
• Vegetable oil.
• Coat hangers with paper removed.
• Clean clay flower pots. Check with staff about plastic pots.
• Computers and parts (for repair and redistribution).
• All household electronics except radioactive smoke detectors (these have to be sent back to the manufacturer) and mercury bearing thermostats (Honeywell will accept these). This then includes working and non-working telephones, answering machines, VCR's, DVD players, radio's, TV's, computers, printers, monitors, copy machines, etc. For TV's, computer monitors and copy machines a $5.00 donation in addition to the regular gate donation is requested.

The regular gate fee for RSI, Inc. as of February 2009 is $8.00 per car.

The Berks County Recycling Center located at 1316 Hilltop Road in Leesport, PA 19533 is another drop-off location where residents can take materials for recycling.

Items accepted include:
• Clear, green, and brown glass
7. **Household Hazardous Waste**

This is not technically recycling but the subject is important enough to mention.

Alvernia University manages all hazardous waste per all applicable EPA regulations. See the Alvernia University Hazardous Waste Plan for more information.

The Berks County Solid Waste Authority offers two Household Hazardous Waste events every year – usually April and October. Residents of Berks County can drop off various hazardous chemicals that they may have at home. This is a free service.

Chemicals include:

- Turpentine
- Wood preservative
- Paint thinners and solvents
- Oil based paints, stains, and varnishes
- Weed killers
- Pesticides
- Asphalt and driveway sealants
- Pool chemicals
- Herbicides and fungicides
- Antifreeze
- Gasoline
- Transmission Fluid
- Motor oil
- Automotive paints and finishes
- Solvents
- Disinfectants
- Rug, oven, and drain cleaners
- Photographic chemicals
- Floor and furniture polish
- Button batteries
- Lithium and Nickel-Cadmium (NiCd) batteries

Items not accepted include:

- Latex paint (allow the paint to dry out and harden then put in regular trash)
- Joint and caulking compound
- Organic peroxides
- Gas cylinders
- Explosives and ammunition
- Radioactive waste
- Infectious or medical waste
- Water based sealants
- Lead Acid (Pb Acid) Batteries

See the Berks County SWA website at http://www.co.berks.pa.us/Dept/SWA/Recycle/Pages/default.aspx for more information.
F. REFERENCES

2. Berks County Solid Waste Authority
   633 Court Street  Services Center, 14th Floor  Reading, PA 19601
3. Recycling Services, Inc.  365 Elm Street  Pottstown, PA 19465
4. Alvernia University Universal Waste Management Program
5. Alvernia University Hazardous Waste Management Plan