



Frequently Asked Recycling Questions:

What is “golden-rod” paper? Is it recycled?

“Golden-rod” envelopes are the bright yellow/gold business style envelopes (or padded envelopes) that are sometimes called kraft envelopes. This paper is difficult to recycle because of the intensity of the yellow dye; it won’t bleach or wash out easily in the re-pulping process.

However, if a location has many pounds of these envelopes, they can be recycled along with corrugated boxes.

What is a kraft envelope?

Kraft paper is brown paper; shopping bags and “cardboard” boxes. It is created by a specific inexpensive process that leaves the paper naturally brown and makes use of the strongest pulp fibers.

What is the difference between cardboard and corrugated paper?

Cardboard is literally the paper from which cards (such as playing or file cards) are made. It is rigid, white paper.

Corrugated paper is actually a carefully engineered board material comprised of paper elements. These are usually made with kraft paper. A “sandwich” is made with two “slices” of smooth kraft paper cemented to a central layer of corrugated (or wavy, molded) kraft paper. Corrugated paper takes clever advantage of the self-reinforcing properties of the arch. Therefore, it is difficult to crush.

In the recycling realm, “cardboard” boxes are known as “old corrugated” containers or OCC.

Do I have to break down the “cardboard” boxes for collection?

If your paper is collected by the DGS program in Harrisburg and you have plenty of storage room, you do not need to break the boxes down. However, if there is not much storage space or you put your boxes in a dumpster for collection, please break the boxes down in order to take up as little space as possible.

What is the difference between office paper and newspaper? Why must they be separated?

The paper we call office paper, known broadly as “white chemical wood paper”, is made from highly processed wood fiber. Besides being carefully engineered for its many types of uses, its most important chemical characteristic is that the pulp from which it is made is free of lignin. This natural chemical is found in all wood cells and is sensitive to light. Removing lignin makes color stability possible.

Quality white chemical wood paper also requires the use of long paper fibers for uniformity of shape, texture and strength. Even when this paper has been used for photo-copies, post-it notes or pages in books it is still valuable to recyclers for its high-quality fibers.

On the other hand, newspaper, or newsprint, is made of “ground wood”. Ground wood is literally tree wood put through a grinder and is only superficially treated with chemicals to break the fiber down so that it can be made into a comparatively rough, light colored pulp. The lignin is not removed from the pulp, which is why newspapers left in sunlight tend to turn yellow. The “ground wood” pulping process, by its nature, creates relatively short fibers. Therefore, since the presence of lignin and weak fibers make newspapers utterly incompatible with white chemical wood paper, it is necessary to keep them separate from one another for recycling.

Do I need to separate different batteries for recycling?

YES, please do not mix the different types of batteries. It is important that they be kept separate from one another because they are recycled in completely different ways.

Lead Acid batteries (vehicle batteries and the sealed black batteries used in emergency lighting fixtures) have value:

- Auto and truck batteries coming from vehicles serviced at state-managed garages are to be returned for credit to the supplier of new batteries as called for by the auto parts contract.
- Other lead-acid batteries should be sold to a local scrap yard (please see the battery recycling guidelines on the web site)
- In Harrisburg, DGS collects all such batteries for all agencies.

Rechargeable batteries (nickel-cadmium and lithium-ion, the kinds found in laptop computers and power tools) are recycled by means of a free-of charge program sponsored by the battery manufacturers: Call2Recycle (1-877-2RECYCLE)

Alkaline batteries (everyday flashlight, game, toy, or remote control power sources, AA, AAA, B, C, and D) are recyclable, but not convenient to work with, considering their weight and lack of value. DGS collects them in the Harrisburg area. Outside of Harrisburg, if you choose to collect alkaline batteries for recycling be prepared to pay for the service. The Recycling Office can assist in finding a vendor to take them.

Please see the following links for more information about recycling batteries.

<http://www.epa.gov/epawaste/conserve/materials/battery.htm>

http://site.greenbatteries.com/documents/Battery_Guide.pdf

<http://batteryuniversity.com/>

<http://data.energizer.com/Static.aspx?Name=Glossary>

<http://www.call2recycle.org/>

Must I remove staples, paperclips, rubber bands before recycling paper?

No, but please conserve Paper clips and rubber bands as much as possible.

Paper should be removed from folders and binders. In the paper recycling process, the paper is turned back into pulp by mixing it with soap and water. As the paper dissolves, the plastic and metal contaminants are either filtered or pulled out with magnets.

Can envelopes with windows be recycled?

Yes, with office paper.

Do glass, metal and plastic beverage containers need to be separated? Can they be co-mingled?

For the Harrisburg program, all types of beverage containers can be co-mingled. If your location is outside of Harrisburg, please check with your recycling vendor as to what is required.

Can I recycle any kind of glass? (Window panes, etc)

The short answer is No.

All glass is recyclable; however, the agency recycling program generally collects container-grade glass only, which are the typical bottles and jars containing food and beverages.

The different types of glass such as container glass, window pane glass, thick plate glass or glazing for lighting, are each made with different formulations. These formulations are chemically incompatible and they cannot be re-used together.

If an agency should need to dispose of a large quantity of old or broken windows, for example, we would attempt to find a processor for them. However, since glass is quite harmless to the environment and expensive to transport, most of the time it makes sense to place it in a landfill.

Why is it necessary to recycle fluorescent lamps?

Fluorescent lamps, including the compact fluorescents (CFLs) along with all other mercury bearing lamps, such as HID lamps, are recycled in order to avoid the contamination of the environment with mercury. The recycling process distills the mercury vapor (a basic ingredient in every fluorescent lamp) and thereby prevents the vapor from entering either ground water (in a landfill) or the atmosphere (through breakage or incineration). Mercury is considered an extremely dangerous chemical and recycling ensures its proper disposition.

What can we do with old thermometers, thermostats and silent light switches?

It is most important that these mercury bearing devices be disposed of properly; fortunately, it is easy to do. Please contact the DGS Recycling Office (717-772-2300) for instructions appropriate for your particular needs.

Why do we recycle ballasts?

Currently, many ballasts are being replaced as part of energy efficiency projects; the older T-12 lamp systems are being re-fitted with T-8 lamps which require new "electronic" ballasts. Ballasts are made with many kinds of metals, which control electrical current. For many years the ballasts contained hazardous PCBs that have since been outlawed. Their prevalence in buildings means that we still must look out for them and keep them sequestered when removed for proper recycling.

Modern ballasts are considerably safer but still contain assorted heavy metals. Responsible disposal, especially on the scale of state agency use, requires careful processing. For more information please contact the Recycling Office at 717-772-2300

What happens to computer hard drives?

With certain rare exceptions, the DGS Recycling Office is to take custody of all old hard drives. **All drives must be degaussed by the Agency's IT Department prior to destruction.** To recycle hard drives, an Agency must submit a STD 551 - Property Disposition Report ([Click Here for 551 Form](#)). Once approved by DGS, agencies can make arrangements for pick up or delivery to the DGS warehouse. Hard drives must include a Chain of Custody form ([Click here for the COC form](#)) hem to a data destruction company in Harrisburg where we shred the drives one at a time. This process ensures that all data has been obliterated.

How is the Commonwealth's old computer equipment disposed of?

All Agency "e-material" is to be processed according to the rules regarding surplus state property; only that equipment deemed unserviceable or unsalable is to be recycled as waste or scrap material. Please visit our State Surplus Property [webpage](#) for more information.



DGS has a contract for collection and recycling of e-waste.

DGS has been recycling the agencies' obsolete electronic equipment since the early 1990s and our means of doing so has evolved along with the e-recycling industry over the years.

As a result of the e-waste recycling law that went into effect in early 2013, several companies are receiving thousands of household televisions and computers which are no longer allowed in landfills or incinerators and must be recycled.

DGS has a list of approved, environmentally qualified vendors to which all Commonwealth e-waste is to be offered by way of a Request for Quotation procedure. All devices with removable storage must be accompanied by a Chain of Custody Form. To learn more about the contract, please visit the DGS Procurement web site and find contract number 4400009722.

<http://www.emarketplace.state.pa.us/BidContracts.aspx> Or, contact the Recycling Office at 717-772-2300