Computers, color monitors, televisions, computer accessories (mice, keyboards, etc.),
other electronic equipment/components (i.e., cellular telephones, TV remote controls,
circuit boards, etc.), and smoke detectors usually contain toxic metals within their
internal circuit boards or other parts (i.e., leaded glass in computer monitors). If placed
in a municipal landfill, these metals can leach from the equipment over time and
contaminate soils and groundwater. For this reason, the Nebraska Department of
Environmental Quality (NDEQ) regulates some computer parts and other electronic
equipment under the hazardous waste regulations when disposed or recycled, and has
banned these items from disposal at landfills.

In addition to the toxic metals within the circuitry, some smoke detectors (ionization
detectors) contain a small amount (approximately 0.9 microcurie) of Americium-241
(Am-241), a radioactive element. Am-241 is not dangerous unless it becomes airborne
and is inhaled. Am-241 primarily emits alpha particles, which have penetration
capabilities of less than that of the skin. In addition, alpha particles do not travel more
than a few centimeters in air.

UNL’s computer and electronics redistribution/recycling program was established to
manage electronics in accordance with regulatory requirements, including State
Accounting rules for surplus property. Under the redistribution/recycling program,
unwanted computer and electronic equipment (other than smoke detectors) are picked
up by UNL Moving Services and delivered to the UNL Inventory Department. This
equipment is offered for redistribution to the campus. That which is not redistributed to
the campus community is offered for public auction. Equipment that is not sold at
auction is sent to Environmental Health and Safety for proper off-site recycling or
disposal.

Smoke detectors taken out of service are to be placed into an EHS provided ‘Universal
Waste – Smoke Detector(s)’ container or tagged for pickup by EHS staff. See EHS SOP
Hazardous Materials Collection Procedures. Immediately upon removing a
smoke detector from service, place it in the EHS provided container or in a sturdy
container and mark the container with the words “Universal Waste – Smoke
Detector(s).” Also, label the container with the date that the first smoke detector was
placed in the container. If you start your own ‘Universal Waste – Smoke Detector(s)’
container, notify EHS of your location and the date you started using the container so
EHS can add your container to our tracking list.
To ensure compliance with hazardous waste regulations and State Accounting rules:

- Do not dispose of computer parts, electronic equipment, smoke detectors, circuit boards, and other like items in the garbage.

- Do not disassemble.

- Manage these items only through UNL Moving Services and/or EHS, as described. Do not self-manage through other outlets.

- Promptly manage unwanted/unneeded electronic equipment or parts. Do not allow unwanted/unneeded items to accumulate.

- Avoid the purchase of Am-241 smoke detectors. Use photoelectric whenever possible.

Contact the UNL Inventory Department at (402) 472-2085 with questions on how surplus electronics should be managed. Direct other waste management questions to EHS.