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X-Ray Equipment Disposal

This guidance document has been produced by the Nebraska Department of Water, Energy, and Environment (DWEE) to provide guidance for medical, veterinary, dental, and other facilities that need to dispose of old x-ray equipment.

X-ray machines manufactured before July 2, 1979, may contain a toxic substance called polychlorinated biphenyls, or PCBs, that can be found in transformers, capacitors, and tube heads. Equipment manufactured before July 1979 must be tested for PCB content before disposal. Disposal options will be dependent on the results of the determination. For disposal options related to PCBs, refer to the Environmental Protection Agency's (EPA's) PCB web page at <https://www.epa.gov/pcbs/>.

X-ray tube housings are generally made of lead, and a hazardous waste determination must be performed if recycling through a scrap dealer is not an option. See the DWEE Guidance Document titled "Waste Determinations & Hazardous Waste Testing" for more information on performing a waste determination.

There is no radiation hazard associated with x-ray equipment because there is no radioactive material in the equipment that can produce radiation, and x-rays are only produced when the equipment is energized. There are no radiation hazards if the x-ray equipment's electrical power is turned off or disconnected.

If the x-ray equipment was manufactured after 1979, or if there is confirmation that there are no PCBs present if the equipment was manufactured before 1979, they may be disposed of in the following ways:

- Transfer ownership of a functional machine to an institution or person authorized to use x-ray equipment
- Scrap or recycle the equipment. Equipment should be made inoperable either by dismantling it, removing the x-ray tube, cutting or removing the power cord, etc. so that the unit cannot produce radiation if powered on.
- Seek assistance from x-ray equipment suppliers in your area
- Dispose of equipment through a waste disposal company

RESOURCES:

- DWEE Home Page <https://dwee.nebraska.gov/>
- EPA PCBs Web Page <https://www.epa.gov/pcbs/>

Contacts:

- DWEE Main Number (402) 471-2186
- DWEE Toll Free Number (877) 253-2603
- DWEE Hazardous Waste Compliance Assistant (402) 471-8308
- Email questions to: DWEE.moreinfo@nebraska.gov

DWEE Publications:

- Environmental Guidance Document – “Waste Determinations & Hazardous Waste Testing”
Guidance documents are available on the DWEE website by clicking “Visit Nebraska Department of Environment and Energy (DEE),” selecting “Forms,” and “Publications, Grants & Forms.”
- [Title 128 – Nebraska Hazardous Waste Regulations](#)
- [Title 132 – Nebraska Integrated Solid Waste Management Regulations](#)
Titles are available on the DWEE website by clicking “Visit Nebraska Department of Environment and Energy (DEE),” selecting “Resources and Services,” “Laws & Regulations,” and “Rules & Regulations.”

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