

# Checklist for Photography and Photo Processing Departments

Items/Processes of Concern	Toxic Metal	Dangerous Waste	Preferred Alternatives and Best Management Practices <sup>1</sup>
Photo processing	X	X	<ul style="list-style-type: none"> <li>• <b>Switch to a digital imaging system.</b></li> <li>• Send unprocessed film and paper to a silver recycler.</li> <li>• Implement a silver recovery program.</li> <li>• Preserve film paper by using oldest first and storing it at a cool temperature.</li> </ul>
Scrap film Paper Plastic film containers		Non-hazardous	<ul style="list-style-type: none"> <li>• Recycle if possible or dispose as solid waste.</li> </ul>
Spent developing solution		Non-hazardous	<ul style="list-style-type: none"> <li>• <b>Use less-toxic preservative such as collodion with a fast-drying acetate.</b></li> <li>• <b>Use low replenishment developers to substantially reduce replenishment rates.</b></li> <li>• <b>Purchase developer solutions that contain less than one percent hydroquinone.</b></li> <li>• Segregate rinse water and developer solutions from spent fixer baths because silver recovery is more efficient in the more concentrated fixer waste stream.</li> <li>• Check with your local sewer provider for permission to dispose used developer to the sanitary sewer.</li> <li>• Do not dispose of spent developer to a septic system, storm drain, dry well, or ground.</li> </ul>
Spent fixer Bleach/fixer baths	X	X	<ul style="list-style-type: none"> <li>• <b>Use low-silver content or non-silver-based film.</b></li> <li>• <b>Replace ferric-cyanide bleach with ferric ethylene-diamine-tetra-acetic acid (EDTA) which is less hazardous.</b></li> <li>• <b>Use low replenishment bleach/fixer to reduce replenishment rates.</b></li> <li>• Use floating lids or balls on bleach containers to keep it fresh.</li> <li>• Squeegees can be used in non-automated and some automated processing systems to wipe excess developer liquid from the film and paper. Squeegees can reduce chemical carryover from one process bath to the next.</li> <li>• Segregate spent fixer baths from rinse water and developer solution because silver recovery is more efficient in the more concentrated fixer waste stream.</li> <li>• Use a low-flow wash after the bleach fixer. You can remove silver that could be carried into the wash, where it is more difficult to remove.</li> <li>• Cover the fixer bath when it is not in use to prevent evaporation or release of toxic vapors and gases.</li> </ul>

<sup>1</sup> Preferred alternatives are shown in **bold font**.

Items/Processes of Concern	Toxic Metal	Dangerous Waste	Preferred Alternatives and Best Management Practices <sup>2</sup>
<b>General</b>			
General inventory			<ul style="list-style-type: none"> <li>• Use <a href="#">Environmentally Preferable Purchasing</a>.</li> <li>• Review Material Safety Data Sheets (MSDSs) for hazardous substance information.</li> <li>• Properly store hazardous substances.</li> <li>• Review curriculum for potential hazardous substance reductions.</li> </ul>
<b>All generated waste streams</b> <b>Spilled products</b> <b>Unused and expired products</b>	X	X	<ul style="list-style-type: none"> <li>• <b>Use chemical inventory and tracking software to centralize product ordering, improve product tracking, storage requirement, waste management, reduce disposal of expired product, and minimize duplicate orders to prevent unnecessary disposal.</b></li> <li>• Identify all potential waste streams and establish designation procedures to determine if a hazardous waste or non-hazardous waste.</li> <li>• Implement dangerous waste designation, collection, accumulation, and disposal procedures for all waste streams.</li> <li>• See <a href="#">Common Dangerous Waste Compliance Issues</a>.</li> </ul>
<b>Batteries</b> <b>Fluorescent lamps</b>	X	X	<ul style="list-style-type: none"> <li>• <b>Use rechargeable batteries.</b></li> <li>• <b>Use LED lamps when appropriate.</b></li> <li>• <b>Use low-mercury fluorescent lamps.</b></li> <li>• Implement a battery recycling program and recycle as <a href="#">Universal Waste</a>.</li> <li>• Implement a whole-lamp recycling program and recycle as <a href="#">Universal Waste</a>.</li> <li>• If not recycled as Universal Waste: collect, manage, and dispose of as dangerous waste.</li> </ul>
<b>Computers</b> <b>Electronic equipment</b> <b>Appliances</b>	X	X	<ul style="list-style-type: none"> <li>• <b>Use energy-efficient computer and electronic equipment, and appliances.</b></li> <li>• <b>Replace mercury-containing equipment with non-mercury equipment.</b></li> <li>• <b>Use vendor take-back programs.</b></li> <li>• Surplus old equipment.</li> <li>• Recycle as <a href="#">Universal Waste</a>.</li> <li>• If not recycled as Universal Waste: collect, manage, and dispose of as dangerous waste.</li> </ul>
Other:			
Other:			

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# Notes, Comments, Follow-up

## Resources

A Guide for Photo Processors: <https://fortress.wa.gov/ecy/publications/SummaryPages/94138.html>

Common Dangerous Waste Compliance Issues: [http://www.ecy.wa.gov/programs/hwtr/P2/schoolsAndLabs/tool/dw\\_issues.html](http://www.ecy.wa.gov/programs/hwtr/P2/schoolsAndLabs/tool/dw_issues.html)

Dangerous Waste Basics: [http://www.ecy.wa.gov/programs/hwtr/manage\\_waste/DangerousWasteBasics.html](http://www.ecy.wa.gov/programs/hwtr/manage_waste/DangerousWasteBasics.html)

Find a Hazardous Waste Service Provider: <http://www.ecy.wa.gov/programs/hwtr/hwsd/index.html>

Treatment by Generator: <http://www.ecy.wa.gov/programs/hwtr/P2/schoolsAndLabs/tool/TBG.html>

Universal Waste Rule for Batteries, WAC 173-303-573(2): <https://fortress.wa.gov/ecy/publications/SummaryPages/98407a.html>

Universal Waste Rule for Lamps, WAC 173-303-573(5): <https://fortress.wa.gov/ecy/publications/SummaryPages/98407c.html>

Universal Waste Rule for Mercury-containing Equipment, WAC 173-303-573(3,4): <https://fortress.wa.gov/ecy/publications/SummaryPages/98407b.html>