



Waste Medical and Photographic Film

Technical Guidance Document HW 02-01

A waste that is sometimes overlooked by facilities is waste medical and photographic film. Hazardous waste regulations require generators to determine if their waste film is classified as a hazardous waste; the silver concentration on the film could cause it to be a characteristic hazardous waste. However, based on test data, most waste film is nonhazardous solid waste.

Film is used in a variety of businesses and for a variety of purposes. Silver is an important part of the process to recover an image on paper, whether it is a family photo or an X-ray taken by the family physician. Most waste film is either disposed in the trash or is recycled to recover the silver. Waste film is safe to handle and is valuable for its silver content. A limited number of companies have established a business by picking up film and accumulating profitable quantities which are sent off-site for the recovery of the silver.

The Environmental Protection Agency (EPA) developed and implemented hazardous waste regulations for "Recyclable Materials Utilized for Precious Metals Recovery." These regulations are found in 40 CFR, Part 266, Subpart F. Waste film falls into this category; however, for Subpart F to apply, the film must be analyzed for silver using the Toxicity Characteristic Leaching Procedure (TCLP). The minimum TCLP concentration that would make the film a hazardous waste is 5.0 milligrams of silver per liter.

Based on recent testing by the Kansas Department of Health and Environment (KDHE) and analyses supplied by various film manufacturers, KDHE concludes that most film is not a characteristic hazardous waste.

In reviewing the available information on waste film, KDHE concludes that:

1. There are recycling programs in place to recycle waste film to recover silver;
2. Waste film is safe to handle and if spilled, can be easily recovered and placed back into the container with no environmental damage; and
3. Most waste film is nonhazardous solid waste.

Based on these conclusions, KDHE considers waste film to be a non-hazardous solid waste and will not require a generator to analyze their film. Although KDHE does not consider waste film to be hazardous, KDHE encourages generators to recycle waste film to recover the silver.

For additional information regarding proper management of solid waste or hazardous waste, you may contact the Bureau of Waste Management at (785) 296-1600 or the address at the top of this document, or visit the BWM web page at www.kdhe.state.ks.us/waste.