



Silver Recovery and Recycling Services for Wisconsin Businesses and Institutions

Who generates silver waste?

Generators of silver waste include the graphic arts, photo finishing, and metal plating industries, as well as industrial and medical X-ray users. Silver waste comes in a variety of forms including photographic film, paper, ash, solutions and sludge.

Common Generators of Silver-Containing Wastes:

Graphic Arts Industry

Photo Finishers

Industrial and Medical
X-ray Users

Precious Metal Platers

Why is choosing silver recovery and recycling services important?

Generators of hazardous waste, including silver waste, are responsible for the proper handling, recycling or disposal of the waste. Silver-containing wastes, because of their toxicity, are typically considered hazardous wastes before and during recovery, or disposal. Silver recovered from these wastes are considered products generated by recycling when they are destined for further recycling or use, and as such, are not regulated in Wisconsin as solid or hazardous waste. Businesses and institutions that generate silver-containing wastes are liable for their own handling of these wastes, as well as the off-site management by others. Therefore, choosing a responsible recoverer or recycler can help protect generators by minimizing the chance that silver wastes will be mismanaged.

Discharges of hazardous waste to a sanitary sewer system must be reported in writing to the local publicly owned treatment works (POTW), WI DNR Bureau of Solid and Hazardous Waste Management, and the U.S.

EPA. While some silver-containing wastes may not be "hazardous wastes" they still cause toxicity problems if released into the environment. State and federal regulations specify standards for discharging silver to sanitary sewer systems, and surface and groundwaters. Compliance with these standards, and compliance with local POTW discharge limitations, which are often more stringent than Federal and State limits, is required to protect POTW operation and sludges, and the water quality of receiving streams or lakes. In addition to reducing liability, easing regulatory compliance and protecting the environment, silver recycling can reduce the cost of managing silver-containing wastes.

What is the difference between silver recoverers and silver recyclers?

Silver recoverers combine on-site silver recovery consulting services with silver recycling services. A recoverer will typically: assist the generator in recovering silver from waste streams; pick up and purchase recovered silver from the generator; and prepare and sell the recovered silver to a refinery for purification.

Silver recyclers usually do not provide on-site recovery consulting or pick up of recovered silver. A recycler will typically purchase silver waste, recover silver from it and sell the recovered silver to a refinery for purification.

How do I choose a reputable silver recoverer or recycler?

1. Focus on experience and professionalism

Ask questions to learn about their experience and professionalism.

Questions to Ask Recoverers and Recyclers

- What is your overall business?
- What is the relationship (e.g., size, corporate structure, etc.) between your silver recovery/recycling services and the larger, overall operations your company performs?
- How long have you been in your overall business. . . and how long have you been providing silver recovery/recycling services?
- Do you perform on-site consulting?
- How much silver recovery/recycling do you do?
- What is your procedure for pickup of silver waste or recovered silver and delivery of silver recovery devices?
- What do you do with the silver waste or recovered silver after you purchase it?
- Who is your refiner?
- Have you or your refiners had any environmental citations or problems?
- Who are your customers?

(Ask for a list of customers with needs similar to yours, and then contact those customers to find out their level of satisfaction with the recoverer/recycler)

2. Check environmental compliance records

The DNR maintains environmental compliance records of silver recoverers, recyclers, and refiners located in Wisconsin. For compliance information, contact the DNR hazardous waste specialist in your district. Also, if possible, check on compliance records of any out-of-state refiners used by the recoverer/recycler. Other states and US EPA maintain compliance records of facilities located in other states.

3. Ask other generators for recommendations

Asking other generators, especially those in the same type of business, about their experiences with silver recoverers, recyclers, and refiners can be valuable. Contact any references provided by the recoverer or recycler. In addition, talk with some generators in the area that were not specified as references.

Silver recovery service providers are listed on the last page of this fact sheet. These companies were listed in the *Wisconsin Recycling Markets Directory*, a publication of the Wisconsin DNR. The directory lists businesses that buy or accept recyclable materials including silver and other precious metals.

Contact the UW-Extension Community, Natural Resources and Economic Development (CNRED) Agent in your county, or the local DNR district office for more information about the directory. For assistance in defining and developing markets for recyclable materials, contact Mary Kohrell, SHWEC Recycling Marketing Specialist at: (414) 465-2707.

SHWEC does not endorse any of the companies listed in this fact sheet or certify that these companies are in compliance with applicable waste laws. SHWEC cautions generators to personally evaluate the services and compliance status of any company they use to manage waste.

Sources

Wisconsin Recycling Markets Directory, WI DNR Solid Waste Reduction and Recycling Section, 1995.

Silver Services, Minnesota Pollution Control Agency, 3/93.

Selecting a Hazardous Waste Transporter, Minnesota Pollution Control Agency, 1/92.

PROVIDERS OF SILVER RECYCLING SERVICES: list covers companies included in the **1995 Wisconsin Recycling Markets Directory**. Wisconsin Service Area noted in parentheses after location.

Acme Scrap Iron & Metal Sturtevant, WI (SE) (414) 835-2662	Diversified Metals Inc. New Hope, MN (NW,SW,SE) (612) 545-5433	Hayward Recycling Hayward, WI (NW) (715) 634-5753
American Iron & Supply Minneapolis, MN (all) (612) 529-9221	Endeavor Recycling Endeavor, WI (SE,SW) (800) 587-5855	Hy-Ho Silver Deforest, WI (all) (608) 221-1375
Bee J's Enterprises Inc. Appleton, WI (all) (414) 733-2140	Chicagoland Processing Inc. Mt. Prospect, IL (all) (800) 323-0830	Kinsbursky Brothers, Inc. Anaheim, CA (all) (714)738-8516
Century Refining, Inc. Lakeville, MN (all) (612) 985-9995	Golper Supply Co., Inc. Appleton, WI (all) (414) 731-3266	Industrial Recyclers Germantown, WI (all) (414) 255-1633
D&M Recycling Onalaska, WI (all) (608) 783-3030	Gus Holman Co./Sadoff & Rudoy Sheboygan, WI (all) (414) 457-2431	Made Ltd. Hillman, MN (all) (612) 277-3981

Maquire & Strickland Refining Minneapolis, MN (all) (800) 486-2858	P.T.L. Metals & Fiber Cologne, MN (all) (612) 466-2171	The Silver Group Belvidere, IL (all) (815) 544-9221
National Recovery River Falls, WI (all) (715) 425-9005	Plenty, Morry Scrap Poynette, WI (SE,SW) (608) 635-7128	TLK Industries Inc. Superior, WI (NW) (715) 392-6253
North American Micro Corporation Denmark, WI (all) (414) 863-6911	Red E. Recycling Grand Marsh, WI (SE,SW) (608) 584-5662	USI Environmental Reclamation West Bend, WI (all) (414) 334-3000
	Sadoff Iron & Metal: (all) -Green Bay (414) 434-0137 -Fond Du Lac (414) 921-2070	Wade Environmental Industries Atco, NJ (all) (609) 767-2760
	Scrap Metal Processors, Inc. Minneapolis, MN (NW) (612) 377-6663	Western Wisconsin Recycling Association Inc. Eau Claire, WI (NW, SW) (800) 873-9972
	Stateline Recycling Janesville, WI (SE) (608) 754-7715	

g For more information, contact your County Extension Agent or SHWEC g

County Extension Information

SHWEC Offices

Green Bay

University of Wisconsin
2420 Nicolet Drive, ES 317
Green Bay, WI 54311
920/465-2707
FAX 920/465-2143

Stevens Point

University of Wisconsin
College of Natural Resources
Stevens Point, WI 54481
715/346-2793
FAX 715/346-3624

Madison

610 Langdon Street, Rm. 529
Madison, WI 53703
608-262-0385
FAX 608/262-6250

Milwaukee

UWM UW-Extension
161 W. Wisconsin Ave., Ste 6000
Milwaukee, WI 53203-2602
414/227-3175
FAX 414/227-3165