

## CHEMICAL WASTE RECYCLING PROGRAM

NIH's Chemical Waste Services (CWS) has an effective recycling program in place for most types of waste collected for beneficial reuse. The waste resource materials are securely packaged and shipped to NIH approved recycling facilities at a reasonable cost and rebate. These include:

- [batteries](#)
- [empty chemical bottles](#)
- [solvents with high BTU](#)
- used oil
- lead
- scrap metals
- [fluorescent & HID lamps, mercury \(elemental & debris\)](#)
- empty steel & plastic drums
- [silver from x-ray films, cassettes and recovery units](#)
- [surplus chemical redistribution on FreeStuff website: <https://stuff.nih.gov/Home.aspx>](#)
- [solvent recovery](#)

Through the chemical waste recycling program NIH has been successful in reducing the quantity of chemical waste that would otherwise be disposed in a manner that has a greater environmental impact. Recycled chemical waste is returned to the economic mainstream in the form of raw material for new products. The following table summarizes the quantities of chemical waste that has been recycled.

<b>Chemical Waste Streams Shipped Off-Site for Recycling (Lbs.)</b>							
	Management Method	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Batteries: Rechargeables and Alkalines	Metals and Alkaline Recovery (retort and smelting)	8011	8188	7537	7471	7783	7698
Batteries: lead-acid	Metal, plastic and acid recovery	30844	21420	56121	16092	37216	62975
Lead scrap	Retort or reuse	2870	2274	1622	3835	1113	1529
Empty steel and plastic drums	Recycle or Reuse	7119	4154	8703	4242	6402	4098
*Solvents, high BTU value	Fuels Blending	186155	189529	210551	26616	27154	27125
Paint w/high BTU value	Fuel Substitution	951	3485	1126	318	2089	683
Used Oil	Fuels Blending	19712	21435	42210	26932	134697	25071
Fluorescent and HID lamps	Retort	21296	21256	15834	20477	22180	17787
Mercury debris and elemental mercury	Retort and Recovery	1696	1709	560	6398	1204	885
Used X-Ray Films, Cassettes and Cartridges	Silver recovery and reuse	1280	920	890	0	650	1298
Glass and Plastic Ware	Recycle and Reuse	21354	18049	56768	122703	154275	157300
Scrap Metals (Started FY09)	Smelting	2351	3289	2010	6644	4763	4482
Building Decommissioning waste	Recycle or Reuse	10943	61535	3335	4839	78991	7700
Recyclables from construction projects	Recycle or Reuse	1592	190378	0	0	0	0
<b>Total, Recycled</b>		<b>316175</b>	<b>547621</b>	<b>420301</b>	<b>443290</b>	<b>652802</b>	<b>552680</b>
<b>Total Disposed &amp; Recycled</b>		<b>652222</b>	<b>946513</b>	<b>965470</b>	<b>1023038</b>	<b>1362221</b>	<b>1418584</b>
<b>Percentage Recycled</b>		<b>48.48%</b>	<b>57.86%</b>	<b>43.53%</b>	<b>43.33%</b>	<b>47.92%</b>	<b>38.96%</b>

## **Outreach Information**

[NIH Chemical Waste Recycling Program Brochure](#)

[Empty Chemical Bottle Recycling Article](#)

[Empty Chemical Bottle Recycling Flyer](#)

[NIH Chemical Waste Recycling Program Poster](#)

[NIH Free Stuff Recycling Promo Card](#)