

The silver bullet: precious metal recovery in healthcare tenders – generate income, boost CSR and improve data security

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Introduction

In 2012, the NHS spent £26 million on silver-bearing wound dressings.

Used x-ray film, instruments and others also contain valuable silver.

Typically, this material is condemned to landfill or incineration, when in fact it is 100% recyclable and could generate significant income.

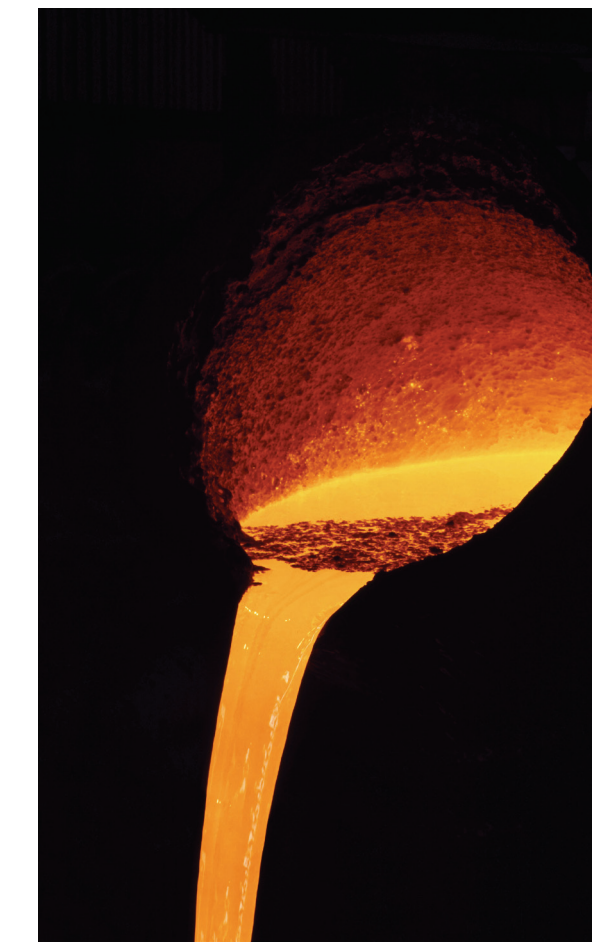
Silver in healthcare products

- Medical x-ray film – most trusts have large archives of x-ray film
- Anti-bacterial dressings
- Nanotechnology – colloidal nanosilver is used for its antimicrobial properties
- Electronics – silver boasts excellent electrical conductivity
- Dental amalgam
- Instrument coatings
- Water purification – the catalytic action of silver and oxygen sanitizes water and prevents the build up of bacteria and algae
- Silver oxide batteries in hearing aids

Case Study – Doncaster Royal Infirmary

Doncaster Royal Infirmary treats 150,000 patients per year. In 2013, Betts Envirometal employed its specialist processes to collect and dispose of used x-ray film, resulting in:

- £17,867 rebate
- 25,438 kg medical x-ray film recovered
- 18,232 kg paper-card recovered – equivalent to flying 17,263 Kms on short haul flights
- 25,438 kg PET plastic recycled – equivalent to driving 118,592 kms in a Toyota Prius



Reaping the benefits of precious metals

Rebate

Trusts pay for the embedded value in products bought in, so they should also benefit at end of life

CSR

'Hazardous' material is often excluded from recycling figures. In fact it is 100% recyclable

Data security

Sensitive data is regularly shipped overseas for recycling, with no clear audit trail

Many waste management firms are not sufficiently accredited and auditable

Carbon

Incorrect disposal increases the NHS' carbon footprint, and can cost up to £1000/tonne for clinical/hazardous waste

X-ray storage

Storage companies often charge expensive tariffs for the removal of records. Under a rebate scheme, organisations could afford to exit storage, and also make a profit

Resource loss

Disposing of silver-bearing wastes alongside general and hazardous wastes is a real waste of valuable resources

Key Questions for Managers

- Could your trust be making a significant **financial saving** by recovering precious metals from waste streams?
 - Does your waste management contractor have a **policy** for precious metal bearing wastes?
 - Will precious metal wastes be **recycled in the UK**, avoiding sending valuable resources overseas?
 - Is the most **environmentally friendly** solution for disposing of precious metal wastes being employed?
 - Does your contractor have the required **security and services standards**?
 - ISO 27001
 - ISO 9001
 - ISO 14001
 - Shredding Standard EN15713
 - Data Protection Registration
 - **Tenders.** Ask waste management firms to include information specific to precious metals.
 - **Betts Envirometal** can advise on all aspects of precious metals recovery.
- Established in 1760, we process solely in the UK and are the only company with full accreditation.