

Table S1
Summary of Applicability of Available Waste Treatment Technologies

Technology	Reference (Page No.)	Vendor	Soils	Irregular Inert Solids (8)	General Waste Types		
					Low Volatility Liquids	High Volatility Liquids	Solids and Semi-solids (6)
Currently Available in Australia on a Commercial Scale							
Base Catalysed Dechlorination	17	BCD Technologies,	Not Yet ⁽⁷⁾	Limited, Not yet	Yes	Yes	Yes
PLASCON	17 84	Technosafe Waste Disposal, SRL Plasma Ltd	Yes ⁽¹¹⁾	No	Yes	Yes	No
Eco Logic	46	Environmental Solutions International	Limited ⁽⁷⁾⁽¹²⁾	Limited ⁽¹²⁾	Yes	Yes	Yes
In Situ Vitrification	114	Geosafe Australia Pty Ltd	Yes	Yes	Yes	Yes	Yes
TFS Thermal Desorption Retort Technology	107	Tox Free Systems	Yes	No	Limited	Yes	Limited
Currently Available Overseas and Represented in Australia							
Molten Salt Oxidation	63	Rockwell International	Possible ⁽⁸⁾	Timber only	Yes	Yes	Yes ⁽⁸⁾
PACT	78	Waste Service NSW	Yes	Yes	Yes	Yes	Yes
STARTECH	90	Zealmore Pty Ltd	Yes	Yes	Yes	Yes	Yes
Steam Detoxifier	93	Enviro-nautics Pty Ltd Qld	No	No	Yes	Yes	Yes
Available Overseas but No Longer Represented in Australia							
PCB Gone	68	SD Myers	No	No	No	No	No
Non-technical Impediments Currently Prevent Use ⁵							
Cement Kilns	34	Rhone-Poulenc/Scori	Yes	Yes	Yes	Yes	Yes

Table S1 (Cont'd)
Summary of Applicability of Available Waste Treatment Technologies

Technology	Reference (Page No.)	Vendor	Soils	Irregular Inert Solids ⁽⁹⁾	Low Volatility Liquids	High Volatility Liquids	Solids and Semi-solids
Currently in Development (overseas or local, refer text)							
Base Catalysed Dechlorination	17	ADI Limited	Not yet ⁽⁷⁾	Not yet	Yes	Yes	Yes
Gasification	42	Fostex	No	No	Yes	Yes	Yes
Molten Slag	60	Illawarra Technology Corporation Ltd	Possible ⁽⁸⁾	No	Yes	Yes	Yes
Molten Metal	56	Molten Metal Technology Inc.	Possible ⁽⁸⁾	No	Yes	Yes	Possible
Catalytic Treatment	31	CSIRO Division of Coal and Energy Technology, Pacific Power	No	No	Yes ⁽⁹⁾	Possible	No
Ball Milling	14	University of Western Australia	Possible	Yes	Possible	Yes	Yes
Supercritical Water Oxidation	98	Queensland University of Technology	Possible	No	Yes	Yes	Yes ⁽¹³⁾
Adsorbents	133	PEC	No	No	Yes	Yes	No
Solvated Electron Technology	71	Solvents Australia	Yes	Yes	Limited	Limited	Yes
Solvent Extraction	130	Various	Limited	Yes	Limited	Limited	Yes
Thermal desorption (PCS)	103	PCS Technology	Yes	Limited	No	No	Limited
Solar Detoxification	125	Various	Yes	No	Yes	Yes	Limited

Notes:

- Capacitor internals may be treated using BCD, provided pretreatment removes the aluminium eg by dissolution in caustic.
- Selected scheduled wastes.
- For example, demolition materials, concrete, timber.
- In situ*.
- Non-technical impediments may include public opinion or perceived public opinion, and commercial considerations such as unwillingness to accept risk for limited benefit.
- Filter cakes, tars, powders.
- Pretreatment required to reduce maximum size to 25 mm.
- If primarily organic.
- May treat transformer
- Pre-treatment of capacitors
- Pre-treatment such as shredding
- Unable to treat significant quantities
- Rubber, plastic products
- Size modifications may be required
- Solids and semi-solids (wastes).
- Could treat entire transformer