

CONTENT

	Page
Part I : Summary	
Background	3
Scope of the Study	4
Treatment Processes Investigated	8
Selection of Treatment Processes for Given Waste Streams	15
Waste Treatment Process Summaries	35
Part II : Treatment Techniques	
Carbon Adsorption	97
Resin Adsorption	138
Biological Treatment : Overview	168
Biological Treatment : Activated Sludge	192
Biological Treatment : Aerated Lagoons	209
Biological Treatment : Anaerobic Digestion	217
Biological Treatment : Composting	230
Biological Treatment : Enzymes	241
Biological Treatment : Trickling Filters	252
Biological Treatment : Waste Stabilization Ponds	260
Calcination	269
Catalysis	294
Centrifugation	311
Chlorinolysis	331
Dialysis	344
Dissolution	352
Distillation	369
Electrodialysis	406
Electrolysis	421
Electrophoresis	435
Evaporation	445
Filtration	475
Precipitation, Flocculation, and Sedimentation	502
Flotation	535
Freeze Crystallization	552
Suspension Freezing	574
High-Gradient Magnetic Separation	590
Hydrolysis	610
Ion Exchange	632
Liquid Ion Exchange	663
Liquid-Liquid Extraction of Organics	680
Microwave Discharge	709
Neutralization	720
Chemical Oxidation	740
Ozonation	767
Photolysis	798
Chemical Reduction	810
Reverse Osmosis	830
Steam Distillation	849
Air Stripping	869
Steam Stripping	881
Ultrafiltration	898
Zone Refining	910