







Solid Waste Reduced, But Not Going Away Anytime Soon				
		1980	2010	
GBB	Solid Waste Generation	3.66 #/Capita/Day	4.43 #/Capita/Day	
	Amount Recycled	<10%	34%	
	Disposed of in Landfills	89%	54%	
SOLID WASTE MANAGEMENT CONSULTANTS		Source: USEPA	5	





U.S. WTE and MRF Plants					
	YEAR	WTE/ RDF	Pyrolysis and Gasification	MRF	Recovered (million tons)
	2011	71/15	1	565	114.5
GBB SOLID WASTE MANAGEMENT CONSULTANTS Source: Gershman, Brickner & Bratton, Inc., 2011 8					

WTE Plants Operating in Virginia					ginia	
	Location	Year of Initial Operation	- Technology Mass Burn or RDF	TPD Design Capacity	Energy Form Sold	Facility Operator
	City of Hampton	1980	Mass Burn	2@120 = 240	Steam and Electricity	City
	City of Harrisonburg	1982	Mass Burn	2@100 = 200	Steam and Electricity (2.5 MW)	City
	City of Portsmouth	1988	RDF	2,000	Steam and Electricity	Wheelabrator
	City of Alexandria / Arlington Co.	1988	Mass Burn	3@325 = 975	Electricity (24 MW)	Covanta
GBB	Fairfax Co.	1990	Mass Burn	4@750 = 3,000	Electricity (126 MW)	Covanta
SOLID WASTE MANAGEMENT CONSULTANTS		Source: Ge	ershman, Brickner (	& Bratton, Inc. , 201	3	9













































Summary of Technologies and Risks/Liabilities Source: Gershman, Brickner & Bratton, Inc. August 2012					
	Alternative	Risks/Liability	Risk Summary		
	Mass Burn/WaterWall	Proven commercial technology	Very Low		
	Mass Burn/Modular	Proven commercial technology	Low		
SOLID WASTE MANAGEMENT	RDF/ Dedicated Boiler	Proven commercial technology	Low		
	RDF/Fluid Bed	Proven technology; limited U.S. commercial experience	Moderate to Low		
	Anaerobic Digestion	Proven technology; limited U.S. commercial experience	Moderate to Low		
	Mixed-Waste Composting	Previous large failures; No large-scale commercially viable plants in operation; subject to scale-up issues	Moderate to high		
	Pyrolysis	Previous failures at scale, uncertain commercial potential; no operating experience with large - scale operations	High		
	Gasification	Limited operating experience at only small scale; subject to scale-up issues	High		
	Chemical Decomposition/ Depolymerization	Technology under development; not a commercial option at this time	High		
CONSULTANTS			32		











