

**PV MODULE DISPOSAL**

According to the Environmental Protection Agency’s Federal Resource Conservation and Recovery Act (RCRA), PV modules must fail the Toxicity Characteristics Leach Procedure (TCLP) test to be considered hazardous. Most PV modules pass the TCLP test, and thus are classified as non-hazardous and are not regulated. Matrix only specifies PV modules that pass the TCLP test.

**PV SYSTEM REMOVAL AND SITE RESTORATION COST**

The vast majority of PV system components can be recycled locally. Metal carport structures, racking, wire, framing, enclosures, conduit and fasteners have commodity-based scrap value that helps offset capital costs related to the removal and disposal of PV system equipment. Figure 1 below illustrates the estimated cost without scrap value, for PV system removal, disposal and/ site restoration. Scrap values are not included because final scrap value will depend upon as-built conditions and materials.

Series 2011 Built Sites		Removal, Recycling & Disposal	
Site	Total Cost		
	Low	High	
Dickerson School	\$ 11,580	\$ 17,545	
Bragg Intermediate School	\$ 30,305	\$ 46,064	
Black River Middle School	\$ 42,268	\$ 64,247	
Pearl Miller School	\$ 14,738	\$ 22,330	
Stonybrook School	\$ 15,264	\$ 23,128	
Canfield Ave. School	\$ 12,106	\$ 18,343	
Randolph High School	\$ 64,215	\$ 131,348	
Randolph Middle School	\$ 27,115	\$ 41,215	
Ironia School	\$ 14,211	\$ 21,533	
Montville High School	\$ 13,685	\$ 20,735	
Lazar Middle School	\$ 12,106	\$ 18,343	
Morris Knolls High School	\$ 23,922	\$ 36,245	
CCM Parking Lot 2	\$ 70,095	\$ 143,377	
CCM Parking Lot 5	\$ 79,715	\$ 153,995	
CCM Parking Lot 6	\$ 88,233	\$ 170,451	
CCM Parking Lots 7 & 8	\$ 212,803	\$ 435,278	
CCM Student Community Center	\$ 23,559	\$ 45,511	
	<b>\$ 755,919</b>	<b>\$ 1,409,684</b>	

  

Series 2011 Unbuilt Sites		Removal, Recycling & Disposal	
Site	Total Cost		
	Low	High	
<b>Recommended Build Sites</b>	<b>\$ 565,655</b>	<b>\$ 977,957</b>	

Figure 1

As we understand, pursuant to the Morris County Improvement Authority Series 2011 Renewable Energy Program documents, each Local Contracting Unit will have the option at the end of a designated 15 year period to purchase its PV system. The subject PV systems traditionally have a 30-year useful life. Each Local Contracting Unit that exercises this purchase option will bear the cost and responsibility of disposing of the PV system at the end of its useful life. If a Local Contracting Unit declines this purchase option, the Developer is responsible for the cost of disposing the PV facility at the end of the 15 year period.