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LOS ANGELES COUNTY  
SOLID WASTE MANAGEMENT COMMITTEE/  
INTEGRATED WASTE MANAGEMENT TASK FORCE  
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April 27, 2015

The Honorable Bill Monning  
State Capitol, Room 313  
Sacramento, CA 95814

Dear Senator Monning:

**SENATE BILL 489 (AMENDED APRIL 06, 2015) – SUPPORT  
HAZARDOUS WASTE: PHOTOVOLTAIC MODULES DISPOSAL**

The Los Angeles County Solid Waste Management Committee/Integrated Waste Management Task Force (Task Force) is pleased to **support** your Senate Bill 489 (SB 489) as amended on April 6, 2015. The bill would authorize the Department of Toxic Substances Control (DTSC) to adopt regulations to designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management.

Pursuant to Chapter 3.67 of the Los Angeles County Code and the California Integrated Waste Management Act of 1989 (Assembly Bill 939 [AB 939], as amended), the Task Force is responsible for coordinating the development of all major solid waste planning documents prepared for the County of Los Angeles and the 88 cities in Los Angeles County with a combined population in excess of ten million. Consistent with these responsibilities and to ensure a coordinated and cost-effective and environmentally sound solid waste management system in Los Angeles County, the Task Force also addresses issues impacting the system on a countywide basis. The Task Force membership includes representatives of the League of California Cities-Los Angeles County Division, County of Los Angeles Board of Supervisors, City of Los Angeles, waste management industry, environmental groups, the public, and a number of other governmental agencies.

Photovoltaic modules (PV), commonly referred to as solar panels, have varying useful lives with some estimates ranging from 25-40 years. The State of California has become a national leader in solar panel installations, yet there are environmental and public health concerns linked with the manufacturing and improper disposal of PV panels. The primary concerns include leaching of toxic waste into groundwater; mining of rare metals (silver, indium, gallium, and germanium) and conventional resources (primarily aluminum and glass); and safety in dismantling. As part of California's effort to invest in solar installation, it is critical to consider its inevitable waste stream by

making it easier for end-users to properly dispose and recycle these PV modules, promote efforts that provide a comprehensive system for take-back and recycling, and discourage disposal to landfills. Currently, there is ambiguity on whether PV modules are hazardous waste per California law. Furthermore the solar industry may assume that the majority of PV modules are silicon-based solar modules that are non-hazardous, but this may not necessarily be true for certain older modules that are still in service.

This bill encourage the photovoltaic industry to develop and implement recycling policies and programs to reduce the waste generated by this waste stream in an economically efficient manner that does not burden consumers or California's already strained solid waste landfills. This bill also provides DTSC the statutory authority to adopt regulations to designate end-of-life photovoltaic modules that are hazardous waste as a universal waste and subject those modules to universal waste management regulations. This will facilitate the proper management of these modules in a safe manner without creating unnecessary burdens.

Therefore, the Task Force **supports** SB 489. Should you have any questions regarding this letter matter, please contact Mr. Mike Mohajer of the Task Force at [MikeMohajer@yahoo.com](mailto:MikeMohajer@yahoo.com) or 909-592-1147.

Sincerely,



Margaret Clark, Vice-Chair  
Los Angeles County Solid Waste Management Committee/  
Integrated Waste Management Task Force and  
Mayor, City of Rosemead

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cc: Senator Kevin de Leon, President Pro Tem  
Senator Ricardo Lara, Chair, Senate Appropriations Committee  
Each Member of the Senate Appropriations Committee  
California State Association of Counties  
League of California Cities  
Each member of the Los Angeles County Board of Supervisors  
San Gabriel Valley Council of Governments  
South Bay Cities Council of Governments  
Gateway Cities Council of Governments  
Westside Cities Council of Governments  
Each City Mayor and City Manager in the County of Los Angeles  
Each City Recycling Cordinator in Los Angeles County  
Each Member of the Los Angeles County Integrated Waste Management Task Force