

Testimony of Stephen Skurnac

Sims Recycling Solutions

Before the Senate Committee on Homeland Security and Government Affairs

“Recycling Electronics: A Common Sense Solution for Enhancing Government Efficiency and Protecting Our Environment”

February 27, 2014

Good morning, I am Stephen Skurnac, President of Sims Recycling Solutions. Thank you, Mr. Chairman and committee members for the opportunity to speak to you today about electronics recycling.

By way of background, Sims Recycling Solutions is the world’s largest electronics recycler, processing more than 700,000 tons per year at 42 facilities in 14 countries and generating revenues approaching US\$1B annually. We operate facilities in developed regions such as North America, the EU, Australia and New Zealand as well as developing countries such as India, South Africa and Dubai. This global perspective gives us unique insight to a variety of electronics recycling business models and government led initiatives. I have personally been involved with electronics recycling since 1991 and prior to that I was employed in the mining and metals industry.

Electronic waste is one of the world’s fastest growing waste streams. According to statistics published by the StEP (Solving the Ewaste Problem) organization, sponsored by the United Nations University almost 48.9 million metric tons of used electrical and electronic products were produced last year – an average of 7 kg for each of the world’s 7 billion people. StEP also estimates that by 2017, the total annual volume will be 33 per cent higher at 65.4 million tons. The US share is currently estimated at 10 million tons. A study by the US EPA looked at data available for 2009 and estimated that 5 million tons of e-waste was in storage and only 25% of the available e-waste was actually recycled. Studies by MIT and the National Center for Electronics Recycling (NCER) suggest much higher recycling rates but also much lower total volumes. The discrepancies are based on different calculation methods and different data pools but it is clear that e-waste volumes are significant and growing enormously.

Electronic waste is both a significant environmental hazard to human health and the environment if not managed properly and also a significant source of commodity raw materials if recycled properly. In addition, used electronic items that are still functioning can be re-used by all manner of consumers in virtually every country where new technology may be too expensive or difficult to acquire.

With the notable exception of the United States, most developed countries treat discarded electronics as a special waste requiring easy and convenient collection from consumers, domestic recycling without export of whole unprocessed equipment and reporting of volumes and materials collected and recycled.

The mechanisms to achieve this vary by country but generally there is national legislation covering the key principles and a robust marketplace involving collection organizations, logistics providers, recyclers and equipment manufacturers.

In the United States, federal rules are in place to manage the export of cathode ray tube (CRT) glass from old televisions and computer monitors but there are no federal laws mandating collection or recycling activities of e-waste. Many individual states have implemented e-waste recycling programs designed to encourage the collection and recycling of certain types of common personal electronics with a general stipulation that manufacturers should be liable for the bulk of the cost of collecting and recycling the old electronics.

E-waste in the United States that is not being stored has three main destinations: domestic landfill, delivery to a domestic e-waste recycler or export to processors in foreign markets. As part of their recycling initiatives, some states have banned e-waste from landfills due to the potential to leach toxic constituents such as heavy metals. Export of e-waste is legal and unrestricted with the exception of federal rules governing CRT devices. Domestic recyclers number over 1,000 and many are certified to one or both of the nationally recognized certification programs for e-recycling. The certification assures that the material will be managed in an environmentally sound manner with transparency as to recycling processes and destinations of commodity products leaving the certified recyclers premises. Domestic recycling also generates significantly more jobs and ancillary benefits than export oriented recyclers.

While volumes of e-waste continue to grow, both globally and certainly in the United States, the success and continued growth of the domestic electronics recycling industry is not as certain due to a confluence of factors. Vast amounts of e-waste remain in storage in homes and businesses due to a lack of awareness of recycling options and more significantly, a convenient and cost neutral collection mechanism. The cost of collection is often overlooked when analyzing the recycling supply chain but it is a significant burden to market participants that must somehow be incorporated into the overall cost mechanism. This issue has been starkly brought to light in New Jersey as the 2011 state law requiring collection and recycling of e-waste has run into problems due to a lack of clarity on funding requirements. The end result is e-waste piling up at county collection centers or some county programs stopping the collection of e-waste because they have no recyclers willing to take the material. The solution requires input from all stakeholders but consensus will be difficult due to competing interests and the need for financial support of the program.

Export of e-waste is an ongoing concern in that some material is still exported to developing countries where significant harm to human health and the environment occurs due to unsophisticated recycling methods. The MIT study suggested this export stream represented only 8% of e-waste but by their own admission the export data was unreliable and the 8% certainly represents the lower end of export volumes. The illegal trade in e-waste has even prompted Interpol to organize a special unit specifically to track and prosecute illegal waste activities.

Finally, used electronic items that are still in reasonable working condition are actively sourced and traded in both domestic and international markets and this segment of the industry is expected to continue to grow as more consumers replace relatively new gadgets with the latest offerings from manufacturers. Older equipment, however, that does not have reuse value presents a challenge to recyclers given the complex mix of commodities contained in the material and the investments required to build and operate recycling facilities.

A further item of concern for any business or consumer that discards electronics is the personal or business confidential data that is contained on the storage devices within the equipment. Certified recyclers will erase or destroy this data during the reuse or recycling processes. Collectors, traders, exporters and un-certified recyclers offer no such guarantees. Managing this data erasure requires additional investment in skills and equipment and while it is a strong component of corporate recycling contracts it is often overlooked in consumer or government sponsored programs. The uncontrolled release of private data through mis-management of e-waste can result in personal identity theft right through to national security issues if government equipment is not managed properly.

Fundamentally, the US is faced with some key discussion points with respect to domestic e-waste.

What decisions should be made with respect to banning e-waste from all landfills in that it contains hazardous components, and technology and business entities exist to reclaim the commodities and prevent environmental damage?

What government led programs, if any, should be initiated or continued to encourage the collection and recycling of e-waste from consumers?

How do we protect consumers and businesses from unwanted leaks of private information through the discarding or recycling of e-waste?

As the largest generator of e-waste in the country, the federal government has taken steps to try and manage its e-waste through certified recyclers. This is a positive step towards responsible recycling and promoting the development of the recycling industry. However, the efficacy of these programs is largely unknown at this time.

Electronics recycling firms such as ours are extremely interested in furthering the development of the e-recycling industry. Manufacturers, recyclers and federal, state and local governments all have a vested interest in responsible recycling. We look forward to continued dialogue with all stakeholders.

Thank you for your time.