Comments from William E. Kopatich, Laser Technologies & Services, Inc.

I am the President of Laser Technologies & Services, Inc., a major remanufacturer of laser toner cartridges. Our business serves consumers by repairing and reselling used toner cartridges. As part of this process, we clean the used cartridges, replace worn components, and add new toner. The resulting remanufactured cartridges are high quality products sold through resellers to consumers at costs substantially below those charged by equipment manufacturers for new cartridges. We agree with Static Control that there are numerous benefits enjoyed by the thousands of American companies and the countless individuals who chose to use repaired cartridges in place of new cartridges. Those benefits extend to the American economy as a whole. Remanufacturers such as our business employ thousands of Americans to repair cartridges. We keep great volumes of empty toner cartridges from going into landfills. In fact, we estimate that our remanufacturing business alone keeps more than 500 tons (more than a million pounds) of empty toner cartridges per year out of America's landfills. By repairing still-useful cartridges instead of making new ones, we reduce America's dependence on the imported oil used to make the body of a new toner cartridge.

The chips that are being used by equipment manufacturers on their toner cartridges represent a serious threat to the existence of the remanufacturing industry and to consumer choice. Most of the newer laser printers currently being sold require toner cartridges with embedded chips that are required to function with the respective printers. To the extent that such chips cannot be reverse engineered, remanufactured toner cartridges without the required chips may not operate effectively with the printers or in

the worst cases, the toner cartridges do not operate at all in the printers. Certain printer models currently being sold will not allow a toner cartridge to operate in the printer without a chip with the embedded software. Consumer confidence in remanufactured goods is seriously challenged when the chips prevent repaired cartridges from performing like new cartridges. This goes beyond our ability to sell cartridges with chips. Many consumers want to buy from a single source. If we cannot supply cartridges for some machines we can lose business for all machines. As the cost of chips fall even further, more and more machines use them, and we may soon see all cartridges using these chips.

Exemption of embedded printer chips from the DMCA will benefit the public as the consumer will continue to have a choice to purchase either an original toner cartridge or a remanufactured (or aftermarket) toner cartridge that operates with the printer. This choice allows the consumer to save money by purchasing a remanufactured toner cartridge. If that choice is eliminated, the costs of new cartridges will be raised even higher, because there will be no competition. Businesses and individuals who use the cartridges will pay the cost. In addition, exempting the embedded printer chips from the DMCA will also ensure that a substantial volume of waste will be eliminated from our landfills.

I strongly agree with Static Control that the DMCA was not intended to prevent the use of repaired toner cartridges in laser printers and should not be used that way. I also agree that this issue is even bigger than our industry. If the DMCA is used in this way, equipment manufactures of all types will try to control the market in replacement parts by use of these very inexpensive chips. Thus, we support a broader exemption as requested by Static Control, for the following classes of goods:

- Computer programs embedded in computer printers and toner cartridges and that control the interoperation and functions of the printer and toner cartridge.
- 2. Computer programs embedded in a machine or product and which cannot be copied during the ordinary operation or use of the machine or product.
- 3. Computer programs embedded in a machine or product and that control the operation of a machine or product connected thereto, but that do not otherwise control the performance, display or reproduction of copyrighted works that have an independent economic significance.

These three exemptions will not affect the DMCA's primary goal of preventing people from circumventing encryption for the purpose of copying protected works. It will make clear that the DMCA was not intended to prevent the interoperability of physical devices.