Workers on recycle sorting lines are exposed to needles in waste streams every day, increasing the likelihood that a worker will come in contact with an exposed, contaminated needle. HexArmor saw an opportunity to engineer a solution for these sorters using its advanced technology and worked with Waste Management, Inc. to spearhead an anti-needle program that has virtually eliminated needle injuries to date.

**Rising Number of Needles in Recycle Streams Creates Need for Better PPE**

Waste Management Inc.'s (WM) increased recycling and sorting demands brought workers in contact with sharps and needles hidden in plastic bottles and containers. Each year recycling workers are exposed to approximately two-to-three billion improperly disposed needles. Exposure to contaminated needles created an unacceptable health risk for employees and the company.

**HexArmor® Collaborates with WM to Develop Needle Protection Solutions**

HexArmor® designers worked directly with WM's safety team to create a series of protective gloves that had the capability to resist needle sticks and punctures, as well as cuts from broken glass shards, steel, wire, and wood splinters commonly encountered in recycling operations. The collaborative nature of the HexArmor®/WM relationship led to the development of a mandated hand and arm protection program for recycle sorters that requires operators and line workers to exclusively wear HexArmor® products while on the job.

SuperFabric® technology was the key to preventing needle sticks and punctures from sharps, as well as offering optimal resistance to cuts in a wide range of recycling and sorting tasks. SuperFabric® stopped needle sticks at the point of attack to protect workers' health and safety. In addition to developing a complete line of recycling and sorting gloves, HexArmor® has developed needle-resistant Arm Guards, which are now also required in the Waste Management Recycling Protection Mandate.

HexArmor® continues to collaborate with WM on improving current products, and engineering advanced solutions that offer superior protection and extended service in a wide range of waste handling and recycling applications.
Product Solutions

HexArmor® was able to engineer 14 generations of hand and arm protection using feedback from Waste Management to eliminate needle injuries on recycle sorting lines across the U.S. The ongoing relationship between the companies is leading to breakthroughs in advanced technology hand and arm protection in other areas of Waste Management’s core business like hauling operations.

Sharpsmaster II® 9014
The Sharpsmaster® II is the result of WM’s request for a single glove solution for needle protection on the sorting lines. Many sites were using a dual glove system, which was costly and didn’t give them the needed protection. The Sharpsmaster® II is one of HexArmor’s most popular needle resistant products, and comes from a long lineage of collaborative feedback from end users and safety professionals.

PointGuard® X 6044
Many sorting facilities prefer a double glove system, where a user will wear the PointGuard® X underneath a latex coated over glove. The advantage to the double glove system is that the liner does not wear out as fast as the cheaper over glove, and protection is not sacrificed.

Needle Resistant Arm Guard
Sorting facilities mandated HexArmor needle resistant arm protection after seeing how well the needle resistant glove program was adopted. The arm protection gives sorters an additional area of preventative protection from needles coming down the sorting line.

Needle Puncture Protection
HexArmor® gloves and arm protection use SuperFabric® brand materials, and are extensively tested according to ASTM F2878 testing for needle resistance. HexArmor® needle products rate 2-3 times higher than competitors on this test, and have been a trusted leader in needle protection for over 6 years.

Cut Resistance
Needles aren’t the only hazards that sorters need to watch out for. Metals, glass, and plastics can come down the line with razor-sharp edges, which call for PPE with high cut-resistance. All HexArmor® products exceed both ISEA/ASTM and CE level 5 for cut-resistance, which is the highest on the market.

HexArmor® is an industry leading manufacturer of high performance personal protective equipment (PPE) made with technologies that push the limits of cut, puncture, needle, and abrasion resistance. Our mission is simple: give you better products with better technology designed with end user needs and collaboration. HexArmor® works with industries from oil and gas, to mining, food processing and waste recycling to design the best working and most protective glove available today.

1 B R Schackman and others. The lifetime cost of HIV care in the United States in the current treatment era.
2 Centers for Disease Control and Prevention.
3 Sterile syringe access and disposal among injection drug users newly enrolled in methadone treatment: a cross-functional survey; McNeely, et..al. Department of Medicine, Brigham and Woman’s Hospital, Boston MA. February 18, 2007.