

**New York State  
Environmental Investment Program**

Accu-Sort America Inc.

**Project Background**

Accu-Sort America was formed in 1997 with the primary focus of supporting the quality control needs of the local automotive OEM manufacturing organizations. Within a few years, Accu-Sort had grown to include light assembly as well as light manufacturing. The year 2006 proved to be challenging as the automotive industry started to slow production. By the end of 2007, GM pulled its remaining contracts from Accu-Sort to source them overseas. Accu-Sort considered new opportunities in order to remain viable in Western New York. The decision was made to develop products from post consumer plastics.

**Project Description**

The focus of this project was to work with post-consumer plastics, (specifically post-consumer carpet and post-consumer #3-#7 plastics), and melt blend them with coal fly ash. If the compounding of these waste streams yielded favorable results, additional research would investigate products that might be manufactured, such as industrial floor blocks, fence posts, utility cross ties, carpet roll cores, railroad ties and sheets for partitions.

**Project Results**

It was determined that the inclusion of fly ash to the formulations caused a brittle condition that was potentially detrimental. Because of this condition it was decided not to pursue the use of fly ash for the remainder of this project. Positive results with the compounding and melt blending of post-consumer carpet and #3-#7 plastics was eventually obtained.

The decision was then made to focus on an industrial floor block, as there was a market for the product. Test lots of the industrial floor block were produced and have been well received, and future orders are pending. Accu-Sort has subcontracted the

manufacture of floor block on a temporary basis while equipment research and funding are being explored.

Accu-Sort engaged the services of an engineer to produce several prototype molds for fence posts and carpet roll cores. Different formulations were molded and tested for qualities such as compressive strengths. The carpet roll core prototype was shipped to a large carpet manufacturer and is currently under review. The fence post is under current testing for UV protection and the ability to hold hardware without splitting. Accu-Sort has formed several favorable relationships within the carpet mill industry and has identified several avenues of potential support. Accu-Sort continues to cultivate these relationships and remains optimistic about future support. The company is currently researching alternatives for financial investment and funding.

Accu-Sort did not complete its research on railroad ties and sheets for partitions molds due to the extreme costs of the molds. However, as mentioned previously, the compounding of the post-consumer materials did yield positive results and future research is certainly justified.

In closing, much knowledge was gained in learning how to collect and process post-consumer plastics and carpet. Critical mistakes are often made when purchasing process equipment. The processing of carpet is very abrasive and damaging to equipment, so it is critical that the project launch with the appropriate tools for success. The recycling of post-consumer carpet is a frontier opportunity and Accu-Sort is looking to position itself as a leader.

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Contractor:	Accu-Sort America Inc.	NYS EIP Investment:	\$ 199,213.00
County:	Erie	Contractor Match:	\$ 53,320.00
ESD Region	Western	Total:	\$ 252,533.00
ESD Contact:	518/292-5340	Completion Date:	Feb. 2009