Post-Consumer Fiber Extrusion

Case Study # 303

Challenge:

A customer contacted Total Recycling Solutions personnel with a need to densify post-consumer Nylon 66 carpet material.

Customer Impact:

The customer was unable to use the material in its current form and did not have the equipment to adequately process the raw material. A potential large-volume raw material supply was being wasted. Supply chain requirements were in place to obtain this material, but necessary processing and filtration parameters were not being met.

TRS Solution:

Total Recycling Solutions personnel worked with customer representatives to address the logistical issues necessary to:

- Minimize warehouse requirements of both the collection and processing locations.
- Develop the extrusion parameters to densify the material.
- Select filtration requirements to remove contamination.
- Post-blend material in 80,000-pound "lots."
- Provide in-process and finished product lab test results to the customer.

Customer shipped multiple loads to TRS for extrusion. "Lumps" and "Chunks" generated by the extrusion process were ground and fed back into subsequent processing to minimize yield loss. Hundreds of thousands of pounds of materials that could have ended up in landfills were processed into usable products.

Conclusion:

A large-volume raw material stream became available for reprocessing. The reprocessing of this material resulted in significant cost savings.

TRS can meet your densification needs.

We can help. Call us.