

## **Facts about Recycling Cut Size Ream Wrap**

Most people recognize that ream wrap packaging helps protect cut size paper from physical handling damage during its life cycle. However, another important design feature of ream wrap is to provide a moisture barrier to stabilize the physical properties of the paper from changes caused by fluctuations in humidity in the environments it encounters during its product life cycle. All ream wrap is designed to a targeted Moisture Vapor Transmission Rate (MVTR) to create this moisture barrier characteristic. Maintaining the moisture, curl, and electrical conductivity properties designed into the finished paper product at time of manufacturing is critical to ensuring that it prints well and runs smoothly in high speed cut sheet printing and imaging equipment in normal end use applications. To the consumer that translates to no print voids in the document text and minimal paper jams when using paper in the imaging equipment.

NORPAC, as well as our competitors, uses either a polyethylene coated paper substrate or a polypropylene film laminated substrate for the cut size ream wrap packaging, depending on the distribution channel requirements for cut size. Therefore, both type wraps contain plastic materials to achieve the required MVTR factor, but each is viewed differently relative to its recycle ability.

### **Poly One Side (PIS) Paper Ream Wrap**

PIS paper ream wrap usually consists of a 50# packaging paper with 7# of polyethylene coating applied to one side to provide the targeted MVTR characteristics. Most people call this material "paper wrap". PIS paper ream wrap is considered recyclable as part of "mixed office waste" streams by most paper waste collection operations in the country. The plastic layer of the ream wrap is removed as a contaminant in the fiber reclamation process and goes to land fill. However, about 65% of the original ream wrap is recovered as recycled fiber for use in new products containing recycled fiber. Note that if an office recycling program focuses only on the higher quality "office paper" waste stream, PIS paper ream wrap would be excluded from that stream, along with colored papers, magazines, carbonless forms, manila folders, and envelopes with plastic windows. On the consumer side, PIS paper ream wrap can be included in the "paper bin" for most curb side pick-up programs. That paper is called "municipal waste" and is a step lower than "mixed office waste" in the waste paper quality hierarchy, due primarily to the higher content of ground wood containing newspapers in that stream. So the answer to whether PIS paper ream wrap is recyclable is, "It depends on the requirements of the waste collection stream being engaged."

### **Poly Laminate Ream Wrap**

Our Poly Laminate ream wrap consists of two 100 or 120 gauge polypropylene films. Printing occurs on the surface of one film sheet. The second film sheet is then laminated to the top of the first printed film sheet. This lamination protects the graphics and adds the strength necessary to protect the ream of cut size sheets. Poly laminate ream wrap has a much higher MVTR characteristic than PIS, and is well suited for ream sale products at retail due to its superior print graphics quality and the strength of the wrap in protecting the product. Poly ream wrap is not considered recyclable in the normal "mixed office waste" streams. However, because it is a clear film, it is recyclable in single category waste streams for plastics as a category 5 PP recyclable material.