2004-05 INNOVATIVE GRANT APPLICATION FORM

Project Information (on applicant letterhead)

1) **Applicant Name:** Polk County

2) **Primary contact person:** Betty Henderson

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Winter Haven, FL 33880

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6) **Project Title:** Statewide Mobile Collection, Processing and Recovery Program for Polystyrene Packaging Waste

7) **Grant Request Amount:** $67,500

8) **Length of project (months):** 12 months

_____
Authorizing Signature

_____
Title

PROJECT ABSTRACT

This proposed project would establish a statewide mobile collection, processing and recovery program for polystyrene packaging waste. In addition to Polk County, two private partners have been identified to assist in this proposed project. Plastic Grinding and Recycling, Inc., a minority owned Florida plastic recycling business will operate a mobile collection and processing program for commercial/institutional polystyrene packaging waste and Timbron International, the second key private partner will use the recovered polystyrene to manufacturer interior molding products.

PROJECT DESCRIPTION

Expanded polystyrene (EPS) foam packaging is the familiar white material that cushions, insulates and protects all types of products during distribution. This includes custom shaped material used to package electronic equipment and appliances, loose fill packaging often called "peanuts", blocks of foam which protect furniture and appliances and shipping containers used to help preserve perishable foods and medicines.

According to the Alliance of Foam Packaging Recyclers, EPS had a national recycling rate in 2000 of only 12.1%. This proposed project would establish a statewide mobile collection, processing and recovery program for this material.

In addition to Polk County, two private partners have been identified to assist in this proposed project. Plastic Grinding and Recycling, Inc., a minority owned Florida plastic recycling business will operate a mobile collection and processing program for commercial/institutional polystyrene packaging waste and Timbron International, the second key private partner will use the recovered polystyrene to manufacturer interior molding products.

An advantage of this proposed project is that an established end market is already in place to accept the recovered material providing a statewide end use market for a hard to recycle material.

The Southern Waste Information Exchange, Inc. (SWIX) will assist in the project by acting as the repository of information and will compile data collection and report preparation as well as assist with the transferability of the public/private alliance concept. The project will enhance the State's ability to increase its recycling rate and promote economic development with a sustainable partnership.

Criteria 1: TECHNOLOGIES

Sub-criteria 1 – Not in common use in Florida

According to the Alliance of Foam Packaging Recyclers, EPS had a national recycling rate in 2000 of only 12.1%. According to the Southern Waste Information exchange, Inc., there is not currently a statewide mobile collection, processing and recovery program for this material. In addition, with the exception of polystyrene "peanuts", the recycling of this material is almost non-existent in Florida at this time.

Sub-criteria 2 – Novel application of an existing technology or process.

This project is novel in that it proposes to create a statewide mobile collection, processing and recovery program for this material.

Sub-criteria 3 – Overcoming obstacles to recycling/waste reduction in new or innovative ways

The obstacles being addressed by this project include:

- Demonstrating the technical soundness of creating a statewide mobile collection, processing and recovery program for polystyrene.
- The general difficulty of achieving a sustainable "win-win" public/private sector partnership that combines the resources of industry and government to reach recycling and resource or materials conservation goals.
- The lack of close-by markets for polystyrene.
- Provision of another recycled content product for purchase by both governmental and private sector entities.

The project helps to overcome the above outlined obstacles by:

- Providing markets for a material that does not currently have end use markets in the state.
- The reports outlining results associated with this project will be public documents and available to other businesses and industries for their review and use.

Criteria 2: TARGETS

Expanded polystyrene (EPS) foam packaging is the familiar white material that cushions, insulates and protects all types of products during distribution. This includes custom shaped material used to package electronic equipment and appliances, loose fill packaging often called "peanuts", blocks of foam which protect furniture and appliances and shipping containers used to help preserve perishable foods and medicines.

According to the Alliance of Foam Packaging Recyclers, EPS had a national recycling rate in 2000 of only 12.1%. This proposed project would establish a statewide mobile collection, processing and recovery program for this material.

An advantage of this proposed project is that an established end market is already in place to accept the recovered material providing a statewide end use market for a hard to recycle commercial/institutional sector material.

While waste polystyrene is not a significant environmental problem, it does however represent a space concern by volume. The material is difficult to manage because it is lightweight and burdensome to move and dispose of. The recovery of this material will help save landfill space.

Criteria 3: BENEFITS

Sub-criteria 1 - Environmental Benefits (15 points)

- Methodology

While waste polystyrene is not a significant environmental problem, it does however represent a space concern by volume. The material is difficult to manage because it is lightweight and burdensome to move and dispose of. The recovery of this material will help save landfill space.

In addition, the supply of this material to Timbron International will enhance its supply of waste polystyrene thus fostering its claim to make its product with 80% recycled content.

- Toxicity

Low environmental impact.

Sub-criteria 2 – Economic Benefits (10 Points)

This project will lead to job growth in an existing manufacturing enterprise, will increase product choice in the State and nationwide for recycled content interior molding, and assist in increasing Florida's currently low manufacturing industry profile. Economic impacts within the State (direct and indirect) are summarized below:

- The development of a public/private sector relationship for the achievement of recycling and resource conservation goals in Florida.
- The use and partnership of a minority owned business.
- The addition of 2 new jobs by Plastic Grinding and Recycling, Inc. as a direct result of this project.

Sub-criteria 3 – Cost Effectiveness (10 Points) Includes, but not limited to cost reduction, payback period, sustainability, and cost-effectiveness.

a) This project will be self-sustaining should this project demonstrate the technical feasibility of using recovered materials in the manufacturing process, since it involves the use of an existing manufacturing industry that produces a product that is currently sold at retail and has an existing network of end use markets for its product. Timbron International will continue to use this recovered polystyrene as long as it is available from Florida.

b) A successful project, such as proposed, will be the basis for "growing" and expanding this process, the markets for the new recycled content product, and of course the use of the targeted recycled materials.

Criteria 4: TRANSFERABILITY

Sub-criteria 1 – Transferability of technology and processes (5 points)

Although the knowledge gained through this specific project will not necessarily result in the proliferation of projects across the State that would use polystyrene in the manufacture of interior molding, this project can be used as a "model" for other local jurisdictions in Florida for encouraging and implementing projects that include the "partnering" of local governments with manufacturers located in their respective jurisdictions for the production of products that contain high percentages of recycled materials.

In effect, the project will serve as a challenge for other counties to pursue innovative local solutions for a difficult to recycle non-hazardous waste stream.

The environmental and economic benefits outlined earlier in this proposal could also be easily "transferred" to other jurisdictions throughout the State that are interested in investigating natural "matches" of manufacturers that use certain virgin materials for which recyclable materials (generated by residents and businesses throughout the State) could be substituted.

Sub-criteria 2 – How project will promote transferability (5 points)

Upon request, SWIX, Timbron International and Plastic Grinding and Recycling, Inc. will team up to provide presentations and written materials about the project to interest groups like FDEP, Florida Sunshine Chapter of SWANA, Recycle Florida Today, Inc., and local/regional economic development councils.

Essential to technology transfer will be a compilation of a case study designed to outline the steps taken in establishing this particular public/private partnership as well as suggested resources that would benefit such a program in other areas. In addition, web sites will be targeted to assist with program dissemination and to provide links to the primary site that will have detailed information about the project. Potential partners in the web site information sharing will include SWIX, Polk County, RFT, SWANA, FDEP, Timbron International, and regional or local economic development councils throughout the State.

In addition, information exchange will be encouraged through the pursuit of article placement in recycling publications in the state such as the RFT newsletter, national trade journals and publications, and appropriate business and economic development journals.

Summary of project transferability activities:

- Two presentations after project completion to regional or local economic development councils.
- Case study compilation for use in workshops, presentations, and web sites.
- Web site posting of all information / reports related to this project by SWIX, FDEP, Polk County, local and regional economic development councils, RFT, SWANA.
- Trade journal articles about project

Criteria 5: LOCAL SUPPORT

The total requested grant funding for this project is $67,500. The project will generate matching (i.e., cash and in-kind contributions) of $50,000 or 43% of the total project costs of $117,500.