

# promoting biodegradable products throughout the world

The Biodegradable Products Institute (BPI) is a not-for-profit association of key individuals and groups from government, industry and academia.

Through our innovative **compostable label** program, we educate manufacturers, legislators and consumers about the importance of **scientifically based standards** for compostable materials which biodegrade in large composting facilities.

We also promote the use and recovery of compostable materials through municipal composting. And we provide information and resources such as how to **find a composter**.

## About the Biodegradable Products Institute

The Biodegradable Products Institute (BPI) is a professional association of key individuals and groups from government, industry and academia, which promotes the use, and recycling of biodegradable polymeric materials (via composting). The BPI is open to any materials and products that demonstrate (via scientifically proven techniques) that their products are completely biodegradable in approved composting facilities.

BPI will accomplish its goals with three key components:

• Education

Informing consumers, generators and municipal and industrial composters of the benefits and availability of biodegradable and compostable materials which meet the specifications outlined below, based on independent testing in the appropriate labs.

## Adoption of Scientifically Based Standards

Promoting responsible use of the BPI Compostable Logo for any product which meets the requirements in ASTM D6400 or D6868, specifications based on more than 8 years of research by suppliers, composters and academia.

## Alliances with Other Organizations

Working with other organizations to further the use and recovery of biodegradable materials, including harmonization of standards around the world.

## **Frequently Asked Questions**

#### Who is the BPI and who are its members?

The BPI is short for Biodegradable Products Institute. It is a multi-stakeholder association of key individuals and groups from government, industry and academia, which promotes the use, and recovery of biodegradable polymeric materials. BPI will accomplish this goal through education, adoption of scientifically based standards and cooperative activities with other organizations in the US, Canada, Europe and Japan.

#### Why is the BPI involved in this program?

Ever since the introduction of "biodegradable plastics" fifteen years ago, confusion and skepticism about claims and product performance has prevailed. This situation stems largely from plastic products that did not biodegrade as expected, yet were able to make claims because no scientifically based test methods and standards existed.

Now that has changed. Specifications do exist. These are <u>ASTM D6400</u> for films and <u>ASTM D6868</u> for packaging which uses biodegradable coatings.

More importantly, technology has advanced to the point where there are plastics that have the functionality of existing products, yet will biodegrade completely and safely when composted, leaving no residues.

The Compostable Logo is designed to address the confusion that has existed by building credibility and recognition for products that meet the ASTM standards among consumers, composters, regulators and others. It is designed to be easily recognizable and able to be placed on the actual product as well as packaging materials and sales literature.

#### Why is the USCC involved in this program?

Non-degradable plastics cost the composting industry millions of dollars every year. They add to processing costs. They increase the percentage of material that is unsaleable and must be landfilled. The remaining plastic fragments reduce the value of the compost, creating lost revenue opportunities.

By working with the BPI, the USCC is able to capitalize on their scientific expertise to assure that products do in fact meet ASTM D6400 "Specifications for Compostable Plastics" or ASTM D6868 "Specification for Biodegradable Plastic Coatings on Paper and other Compostable Substrates". An easy to identify symbol goes a long way to minimize the confusion that has existed in this area for the past 15 years.

#### What benefits will this program bring to the composting industry?

The program will save composters money by helping to eliminate the costs that plastics generate. Also, biodegradables will expand the feedstocks that composters can readily handle. For example, food scraps from special events and institutions often contain disposable plastic cutlery and straws. These are impossible to economically separate. By replacing ordinary plastics with biodegradables, now the entire wastestream can be composted, rather landfilled, as in the past.

#### How do you know that the products will compost satisfactorily?

The test methods and specifications found in <u>ASTM D6400</u> and <u>ASTM D6868</u> mimic what takes place in wellrun municipal or commercial composting facilities. These tests were developed after 8 years of intensive work conducted at the request of the ASTM (American Society for Testing and Materials). Participants in the study included the USCC, resin suppliers and the scientific community. The work identified 3 key criteria for materials and products to be compostable:

- They must biodegrade at a rate comparable to yard trimmings, food scraps and other compostable materials, such as kraft paper bags.
- They must disintegrate, so that no large plastic fragments remain to be screened out.

Yes, many of these products have been in use for a few years and composted by USCC members.

A growing list of communities, including San Francisco, CA and Portland OR rely on the BPI to identify products that work will compost quickly and safely.

For example, biodegradable bin liners are used in a number of organics collection and composting programs in grocery stores, to minimize washing and keep bins cleaner. Also, **biodegradable foodservice ware** is in use today in colleges and cafeterias.

#### Are these products designed for composting at home, also?

No, the Compostable Logo identifies products that will perform satisfactorily in well managed municipal and commercial facilities-ones that meet the requirements found in the USCC's Field Operator's Guide. We will insist that producers use the appropriate language in conjunction with the Logo to make this distinction clear.

While there are hundreds of thousands (possibly millions) of home composters, their piles or composting units typically do not generate the temperatures needed to assure rapid biodegradation of this new class of materials. For this reason, claims are limited to larger facilities.

#### What tests will be involved?

There are 3 key tests involved. All are referenced in the ASTM D6400 and D6868. The first measures the ability of the product or material to be converted to carbon dioxide by the organisms found in a compost pile at an acceptable rate. The second test measures the ability of the materials to fragment, so that products do not clog the screening equipment. The third test measures the ability of the resulting compost to support plant growth.

#### What products will be available and when?

While it is premature to discuss specific manufacturers at this time, interest in the Logo program has already been expressed by manufacturers of food serviceware, bags and bin liners and raw materials.

Depending on the prior testing that has been completed, the review process should take 30- 60 days. Then it is a question as to how quickly graphic changes can be implemented by individual manufacturers. It is reasonable to expect products on the market carrying the Logo by the end of the year.

The list of products is approved by the BPI is growing rapidly. Click on the links below for a list of <u>certified</u> <u>compostable products</u>.