



Sustainable Supply Chain and Technology Program

New York State Pollution Prevention Institute (NYSP2I) assists companies with achieving their Sustainable Supply Chain goals by helping to offset costs associated with greening operations and supply chain

Testing Support for “Biodegradable Products Institute” Certification



Client

Ecovative Design, LLC (Ecovative) is a materials science company developing a new class of high-performance products which serve as environmentally responsible alternatives to traditional foam packaging, insulation, and other plastic-based materials. Ecovative’s EcoCradle® Mushroom® Packaging is a new technology for environmentally responsible packaging materials made from agricultural byproducts and mycelium, or mushroom “roots”.

Opportunity Areas

Products made from materials that are biodegradable and can be composted are becoming a preferred option to sustainability minded consumers. The Biodegradable Products Institute (BPI) has a scientifically based standard and label for compostable materials which biodegrade in large composting facilities. Products with the BPI label can be identified as compostable and an environmental option to consumers



Objectives

Ecovative requested that NYSP2I’s Sustainable Supply Chain & Technology Program provide assistance in obtaining certification through the Biodegradable Products Institute. Ecovative required disintegration testing to the ISO 16929 “*Determination of the degree of disintegration of plastic materials under defined composting conditions in a pilot-scale test*”, to satisfy the BPI certification requirements.

Work Performed

NYSP2I provided guidance to Ecovative for the sample preparation of their materials for testing to the ISO 16929 disintegration test and identifying an approved BPI testing lab. NYSP2I created a procedure that would enable Ecovative to construct their own in-house disintegration test platform similar to the ISO 16929 to validate different material formulations, before paying for expensive lab testing.

Results

Ecovative materials successfully passed the ISO 16929 disintegration testing proving their materials are biodegradable in a composting facility and allowing them to proceed forward with BPI certification. Ecovative projects up to a 20% increase in customers as a result of becoming BPI certified, along with creating 15 new jobs in New York State.

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