Comparative Hazard Assessment for Ecologic Solutions, Inc.

Client
Based in Brooklyn, NY, Ecologic Solutions, Inc. is a manufacturer of non-toxic commercial cleaning solutions. The majority of Ecologic’s products carry a third-party logo, including the Green Seal and the US EPA’s Design for Environment, which certify that the products were designed with a focus on the environment.

Opportunity Areas
Ecologic had an opportunity for growth in the retail food sector and needed a vehicle for articulating the environmental benefits of their products. The company was interested in improving customers’ understanding of its signature Electrical Chemical Activation (ECA) technology, by comparing it with sanitizers more commonly used by the food industry.

Objectives
Ecologic requested that NYSP2I’s Sustainable Supply Chain & Technology Program create a web-based comparative hazard assessment tool to demonstrate differences in the environmental and human health impacts of Ecologic’s Electrical Chemical Activation (ECA) technology and other baseline technologies. The tool was intended to help potential Ecologic customers make more informed purchasing decisions.

Work Performed
A hazard assessment framework was developed that enabled review of the human health and environmental impacts of the ingredients of the sanitizer produced by Ecologic’s ECA technology and those of traditional ingredients in quaternary ammonium based disinfectants. The U.S. EPA Design for the Environment Program Master Criteria for Safer Ingredients, Version 2.1 (September 2012) was used as a guide for selection of both the decision-making criteria and the impacts evaluated. A web-based interface was designed to display the results of the assessment and ultimately enable product comparisons.

Results
The resulting science-based framework will support Ecologic Solutions as they seek to expand their customer base and differentiate themselves as an environmentally-preferable supplier. Although the initial class of sanitizers assessed was narrow, the tool was designed to allow Ecologic Solutions to insert additional data and generate comparisons targeted at other market segments. The potential growth in sales as a result of this project was anticipated to help Ecologic Solutions create six new jobs.