



## UGL Unicco Helps PolyOne Meet Quality Goals – Implement Lean Six Sigma

### *Preventive maintenance addresses recurring issues...*

PolyOne Corporation is a global leader in the production of a comprehensive array of specialized polymer materials, tailored services and end-to-end solutions. It offers more than 35,000 products to more than 10,000 customers in 35 countries. With more than 30 manufacturing facilities in 20 countries in North America, South America, Europe and Asia, it recorded annual revenues of \$2.1 billion in 2009.

UGL Unicco provides manufacturing and logistics services in support of North American PolyOne production facilities, including Dyersburg, TN where PolyOne performs contract manufacturing of specialized polymers for chemical companies from polypropylene, polycarbonate and polystyrene feedstocks.

Explained Glen Adams, PolyOne Plant Manager for the Dyersburg and Clinton, TN production facilities, “We take basic materials and add fillers, colors and other additives. We compound them into high-quality, custom formulas for customers that mold parts for electronics, healthcare, industrial, textiles, transportation and other industries.”

UGL Unicco’s 20 employees are crucial to plant operations at Dyersburg. They manage the loading and unloading of bulk materials on rail cars and bulk trucks, kit raw materials for the production line, manage the warehouse and distribution operations, as well as provide shuttle service between the plant and the warehouse.

Together, the two companies have instituted a plant-wide Lean Six Sigma initiative in both production and logistics. They work as one in order to stay on a course of continuous improvement in terms of quality, process and customer satisfaction.

To this point, Lean Six Sigma has addressed process mapping, Pareto analysis of defects, elimination of waste, goal sharing, identifying and applying best practices, and developing a standardization, training and certification program for the material handlers. The continuous improvement process actually predates the Lean Six Sigma initiative.

Attacking quality issues is an across-the-board effort according to Adams. “We start by tracking one of PolyOne’s key performance indicators – customer complaints, which we track by the defects-per-million opportunity or DPMO rate. We categorize complaints by the function that is the root cause of the complaint. So, if it is a quality complaint based on how the material performs, the matter is sent back to production. We also have a category on logistics related to errors in shipping, paperwork, or damage during shipment.”

Adams is pleased with UGL Unicco’s response to the quality challenge. UGL Unicco “brought in new supervision and looked at some focus topics identified where the defects were occurring and what could be done to correct the issues. Improvements were made to the organizational structure, which eliminated the vast majority of the complaints.

### **PROJECT SUMMARY**

**Customer:** *PolyOne Corporation, Dyersburg, TN manufacturing facility*

**Industry:** *Plastics*

**Situation:** *Continuous customer service improvement and implementation of Lean Six Sigma*

**UGL Unicco service:** *Production support and logistics*

**Results:** *Zero customer complaints while reducing variable costs by almost half and exceeding inventory goals.*

**Company:** PolyOne Corporation

**Industry:** Production support and logistics

“Our DPMO rate has substantially dropped. We’re pleased with our quality plant-wide performance and defect rate,” said Adams.

UGL Unicco has been recognized several times over the years by PolyOne, receiving “Logistics Supplier of the Year” awards. Most recently, the company was honored for shipping more than 3,200 orders over the last two years without receiving a single customer complaint. This was accomplished while reducing variable costs by forty-three percent and exceeding inventory control targets.

“This is an outstanding customer service and overall performance standard,” said Adams. “It’s something that PolyOne and UGL Unicco have been striving for for years. Now that we’ve accomplished it, we have to remain vigilant and keep delivering the same results in the future.”

The two companies are continuing to move down the Lean Six Sigma path. They are working on some workflow issues, as well as continually seeking to improve inventory management and accuracy, and reduce material movements in the warehouse.