



# Pollution Prevention E-News

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## “A Very Good Investment...”

The Florida Department of Environmental Protection’s Pollution Prevention Program (P2) has, in the words of Wheelblast Inc. President Michael Lynch, “been a very good investment for Wheelblast Inc.”

A team of P2 Resource Engineers Technical Assistance Program (RETAP) staff, including Phil Corso, Mike Doogah and Ken Brian, visited Wheelblast Inc.’s Zephyrhills facility to perform a Green Opportunity Survey in Fall 2007. The team toured the plant that manufactures pilings for harbors and discussed various opportunities for operational improvements with Mr. Lynch. Following the tour, the P2 team submitted a final report with several recommendations

for environmental and operational improvements.

The first recommendation that Wheelblast Inc. has implemented is the installation of a large diameter pipe for transporting air from compressors to a coal tar epoxy coating area. Mr. Lynch reports that this facility update has been particularly beneficial since the new air line resulted in the shutdown of a diesel auxiliary air compressor previously required for the operation of the coal tar epoxy coating area. Based on the amount of diesel fuel saved, P2 calculations estimate a CO2 emission reduction of 4,500 pounds per month and 54,000 pounds per year. The company will also see a financial

savings of between \$500 and \$700 per month or up to \$8,400 annually. This improvement will pay for itself in one year. No significant increase in electrical usage at the facility has been noted, since the new pipe does not leak and the company is able to operate the electric motor driven air compressors at a lower pressure. Additionally, the project was for the purpose of pollution prevention and ad valorem taxes were not incurred.

The P2 Program’s assistance has resulted in Wheelblast Inc. reducing its environmental impact, saving money and operating more efficiently. They plan to implement additional recommendations this year.

## RETAP Staff Attends Lean Training

Practical strategies and techniques for Lean implementation were presented to the RETAP and P2 Program staff during a workshop funded by U.S. EPA in Tallahassee, January 26-30. Lean manufacturing focuses on eliminating waste, enhancing quality and delivering value to customers and can be combined with environmental performance goals to provide a more comprehensive approach to meeting a facility’s many challenges.

The three core methods used in Lean production were presented and reviewed in detail: 1) Value Stream Mapping documents material flow from beginning to end; 2) Kaizen events, also known

as rapid process improvement events, are activities designed to eliminate waste and make rapid changes in the workplace; and 3) 5S is a production improvement system based on the pillars, Sort, Set in Order, Shine, Standardize and Sustain, designed to reduce waste and optimize productivity to achieve more consistent operational results.

These tools will enable P2 and RETAP staff to incorporate Green Opportunity Surveys for industry, businesses and government.



L to R: Back row: Dick Alguire, Tom Hereford, Mike Doogah, Bill Vollmer, Brad Stombeck, Lisa Galocy, Aprilia Graves, Jan DeLaney. Middle row: David Babb, Terry Crossett, Kim Rush, Ralph Markey, Phil Corso, Ken Brian. Front row: Instructor Arnold Most, Jay Hammett.

## Quick Payback for MTI

BAE SYSTEMS, Manufacturing Technology Inc. (MTI) requested a Green Opportunity Survey from DEP’s Office of Pollution Prevention to assist them in conserving energy and water. With assistance from Northwest District P2 Coordinator Nicole McDonald, former Tallahassee P2 supervisor Aprilia Graves and RETAP representative Ken Brian, the company was able to employ two-step countercurrent rinsing, reducing the amount of wastewater produced during the startup of their aluminum

chemical conversion treatment line by approximately 82 percent.

In addition to the reduction in water consumption and wastewater, the reduction in the frequency of changing the baths has improved production line efficiency. The aluminum chemical conversion line is available for operation an additional 20 hours per month as a result of avoiding the bath changes associated with the original procedure. The company has also implemented

recommendations in the P2 team’s final report to utilize newer, more environmentally friendly chemicals and incorporate rinse waters in the preparation of the chemical treatment bath, substantially decreasing the frequency of disposals.

The company is building on their P2 success and implementing other energy and waste reduction opportunities as they are identified, either from the P2 report or internal to their operation.