

Closing the
Circle Award
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Closing the Circle News

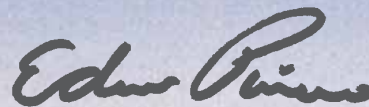
In his Earth Day 2006 speech, President Bush said that we all have a responsibility to be good stewards of the environment to benefit the quality of life of the American people. This year, as the price of oil continues to rise, stewardship and conservation of resources are more important than ever. The Federal government continues to promote stewardship not only in its research and development programs, but in the day-to-day operations of its facilities.

For more than a decade, the Closing the Circle Awards have celebrated Federal facilities and individuals for excellence in reducing their use of toxic and hazardous chemicals, eliminating waste, recycling, and purchasing of a variety of products with energy and environmental attributes. As the scope of Federal stewardship activities expanded, we expanded the awards to include the implementation of environmental management systems, sustainable design of Federal buildings, the use of alternative fuel vehicles and alternative fuels, and reduction in petroleum use. This year, we also focused the Purchasing category on the use of biobased products, as part of our efforts to work with the U.S. Department of Agriculture to create and sustain markets for products made with biobased feedstocks.

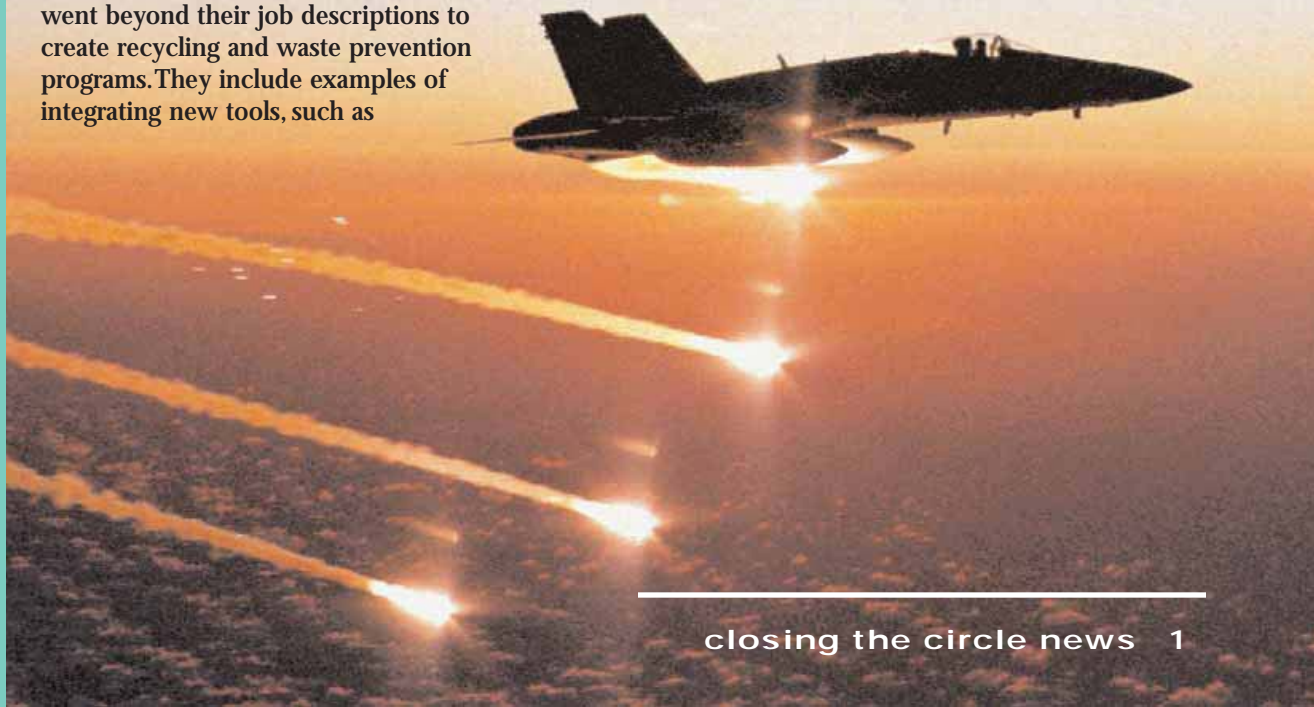
In this edition of Closing the Circle News, we are pleased to share with you the 16 winners of this year's Closing the Circle Awards. They include facilities that won a Closing the Circle Award in the past and have now expanded their award-winning programs or taken on new challenges. They include individuals who went beyond their job descriptions to create recycling and waste prevention programs. They include examples of integrating new tools, such as

environmental management systems, with more established tools, such as pollution prevention opportunity assessments to reduce chemical usage and waste, save money, and create a safer workplace as well as reduced risks to the surrounding environment. They also show the benefits of partnerships between program areas on a facility, with other Federal facilities in a region, with concessionaires, and between Federal facilities and local communities. Most of all, they show that by making environmental considerations a part of everyday decisions, they can conserve resources, protect the environment, save money, and improve their mission operations.

We dedicate this issue to the award winners, and in essence why we give the awards in the first place, for two fundamental reasons. One is to rightfully recognize and reward great performance. Second, and in the long run probably even more beneficial than recognizing performance, is that the awards process provides an opportunity to share with our peers and stakeholders innovative approaches to environmental stewardship. The hope is that others will emulate the pioneers represented in the winners. We trust that you will find these stories inspiring, informative, and maybe even a bit of a challenge to strive to win next year! ■



Ed Piñero
Federal Environmental Executive



Coast Guard Aircraft Repair and Supply Center Engineering Support Team: Corn Starch Dry Blast Media

Elizabeth City, NC

In another example of preventing waste and saving money while meeting its mission, the U.S. Coast Guard's Aircraft and Supply Center (ARSC) tested and approved a biobased alternative to conventional aircraft paint strippers. With forward thinking, ARSC successfully demonstrates the positive impact green purchasing has on the environment.

ARSC's principal function is operating the aircraft depot maintenance facility for Coast Guard aviation assets. The Coast Guard's 200 winged aircraft undergo a detailed invasive maintenance inspection every 4-6 years. All paint must be removed from the airframes being inspected. ARSC previously used two methods of paint stripping: abrasive media such as glass beads and plastic blast or chemical paint strippers. The abrasive media damaged the underlying airframe, while the chemicals are hazardous to employees and resulted in a substantial hazardous waste stream.

ARSC turned to intensive market research and private testing of alternatives that would perform as well while eliminating hazardous waste and avoiding disposal costs. The environmentally friendly option, a dry blast media known as Envirostrip GPX®, proved to be a beneficial asset to the ARSC paint stripping process. Envirostrip GPX® is a non-toxic, biodegradable engineered polymer media derived from corn. Once it is used, it can be returned to the U.S. distributor, Midvale Environmental Technologies, for recycling into a new product known as StarZorb®. StarZorb® is used as a spill absorbent at a licensed treatment, storage, and disposal facility. This cyclical method thereby literally closes the circle of

recycling, reducing, and reusing natural resources.

Switching to Envirostrip GPX® required only simple modifications to existing equipment. ARSC found that the product could remove just the top coat of paint, leaving the primer intact. The underlying substrate is not damaged. The product also allows ARSC to strip an airframe completely without damage. Since their recent switch, ARSC has reported successfully stripping the paint from 43 different airframes and their associated parts, using the cornstarch blast media.

The three immediate benefits of ARSC's green purchase of cornstarch blast media are evident in 1) the health benefit derived from the significant

decrease in personnel's exposure to hazardous chemicals; 2) the elimination of a hazardous waste stream, resulting in greatly lowered disposal costs and enhancing environmental stewardship; and 3) the enhanced capability and flexibility ARSC enjoys in the paint stripping process. ARSC found life-cycle cost savings from a combination of lower unit costs than conventional products and avoided disposal fees.

Many of the DoD aerospace depots are following ARSC's lead. The Navy, the Marine Corps, and Lockheed Martin Aeronautics will test the product this year. For further information, please contact Mr. Carl Woody at 252-335-6624, or Carl.E.Woody@uscg.mil. ■

