



2002 Green Zia Company Profile

Manufacturing, Science and Technology Center 14100 Sandia National Laboratories

The Manufacturing, Science and Technology Center (MS&T) received Green Zia Achievement recognition for the 2002 Green Zia Program year. With their receipt of an Achievement Level award, MS&T has taken another step toward attaining their goal of environmental excellence.

Center 14100 employees over 250 employees. They develop and apply advanced manufacturing processes to support Sandia's primary mission of ensuring that the nation's nuclear weapons stockpile is safe, secure, and reliable. Components for the stockpile are typically complex electro-mechanical or electronic parts designed to withstand harsh environments with high reliability. The Center also performs research and development for processes requiring manufacture of specialized material components that can no longer be obtained either commercially or at another DOE site.

The main processes include organic materials, mechanical engineering, thin film vacuum packaging, computer applications for



MS&T receives 2002 Achievement recognition from Governor Johnson.

manufacturing, electronic fabrication, manufacturing products, processing, and services and ceramics and glass.

In 2000, the Machine Shop applied for and received a Commitment Level Award. The Center's director was so impressed with the results shown by the Machine Shop, that he decided to apply Green Zia tools to the entire center.

Pollution Prevention at MS&T

The MS&T Center has implemented several pollution prevention (P2) initiatives relating to waste reduction goals for the Machine Shop (Organizations 14181 and 14186). Over the last seven years, the Machine Shop has achieved a 35% reduction in waste generation.

Chemical tracking and waste minimization initiatives have reduced the number of chemicals and cleaning solvents by 50%.

Coolant recycling shows a 50% reduction and additional coolant recycling efforts are projected to reduce waste generation by an estimated 30%.

Successful Approaches at MS&T

New successes are being planned. The Green Zia team will be applying Green Zia tools to other processes in the Center. The tools help organizations evaluate processes to reduce waste and resource use. An energy reduction initiative, already underway, is projected to save about 15 to 20% of energy costs immediately with an additional savings of 10 to 15% over the next several years. Plating processes are being evaluated to determine if bath sizes can be reduced thereby reducing waste generation. The use of chlorinated solvents is also being re-evaluated to determine if less hazardous chemicals can be substituted.



John Zich, ES&H Coordinator, signing the Green Zia Commitment certificate in front of Governor Johnson, Environment Secretary Peter Maggiore, and Green Zia Program Manager Dave Wunker at the 2001 Green Zia Recognitions and Award ceremony.

“The MS&T Center Director was so impressed with the results shown by the Machine Shop, that he decided to apply the Green Zia tools to the entire center.”

- John Zich, ES&H Coordinator

Results

MS&T projects a savings of about 15 to 20% energy costs immediately with an additional savings of 10 to 15% over the next several years by implementing an energy reduction initiative.

If you have any questions about the Green Zia Program, please contact:

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John Zich, ES&H Coordinator, explains how the Green Zia Program has been beneficial to the MS&T Center.