Devens goes from khaki to green

Public/private partnership benefits former army base

BY CHRISTINA P. O'NEILL

he aerial photos on the wall tell the story best. They show all of Devens' 4,400 acres in shots from 1996, 2002 and 2004. You can practically see the former army base grow, with new industrial and residential buildings, plus a retail/hotel center. But the most dramatic visual change is the parade field, one of the bigger patches of land. In 1996, it's brown. By 2004, it's vivid emerald green. So are soccer fields and other land tracts. Not bad for a Superfund site.

The Devens parade field is only the most literal interpretation of the "green" program called EcoStar. Since its launch last year, EcoStar has already attracted state, federal and international attention as a role model of how sound ecological practices can save both resources and money. That's why the Worcester Business Journal is recognizing the EcoStar program as an example of a successful public/private partnership.

In 2003, the Devens Enterprise Commission created the EcoStar Steering Committee to set environmental standards and launched it in 2005. "We're building Devens day by day as we go," says Charles Duval, public works manager for the Devens Enterprise Center. "The thought line was, can you make life better

by sharing resources?"

Peter Lowitt, director of the Devens Enterprise Commission, says the steering committee learned that businesses wanted an environmental program that gives recognition, first and foremost - a branding and logo program that would attract customers. Research has shown that when given a choice of two products priced roughly the same, but with one of them environmentally friendly, "people will buy the green one," he says.

The DEP Solid Waste program staked the EcoStar program with a \$10,000 grant, and the Devens Enterprise Commission has underwritten program development for the past two and a half years at \$15,000 annually. Intel Corp.



provided additional funding. But this doesn't begin to count the investment of person-hours into the effort.

One company's trash is another company's treasure

Today, 18 of the 80+ businesses at Devens are members of the EcoStar program, a voluntary effort. The ways in which each company participates varies by industry - they may adopt conservation practices for energy, water, or management practices for solid waste. With the latter, one company's waste stream can be another company's raw material source, saving both purchase and disposal costs. For example, Parker-Hannifin Corp.'s waste oil is used to heat a greenhouse, and bioprocessing waste from Novo Nordisk is used in landscaping to make the grass greener. A comprehensive solid waste management and recycling program is under development for Devens companies, residents and schools.

The greening of Devens

Not only are the 13 soccer fields at Devens greener - they get that way with far less water and fertilizing chemical use than traditional methods. The base's Public Works Department, another enrollee in the EcoStar initiative, is eager to teach area landscapers about a methodology which has saved the base millions of gallons of water and tens of thousands of

The sandy terrain at Devens doesn't naturally lend itself to sustaining grass. The ecological challenge for Duval and assistant public works manager Mike Cabral was to create topsoil without using topsoil. The solution: Biocompost, made up of decomposed wood chips, yard waste, gelatin and other biosolids that absorb and retain water. While the biocompost is only a quarter-inch thick, it creates a stressresistant surface that's friendly to grass and earthworms but not to weeds. "The guys tell me they can hear it growing," Cabral

Savings on water and chemicals have been dramatic. In 2001, before the program began, Devens used three million gallons of water and spent \$75,000 for chemical fertilizer, and the turf was seeded three or four times a season. Now, water use is down to 600,000 gallons and spending on fertilizer was \$28,000 in 2005. Another savings: while chemical fertilization makes grass grow too fast, biocompost creates a robust but slowergrowing grass, requiring less staff time and energy to maintain.

Thinking outside the box

Ronald McGuigan bought into the EcoStar program from the beginning. He's Southern Container's general manager at the Devens facility, a role which



Peter Lowitt AICP, director of the Devens Enterprise Commission, poses at the site of the Gillette facility at Devens. The base's EcoStar program is an example of integration of environmentally-sound practices and good business sense.



Martha Demerjian, president of Eglomise Designs Inc., in the company's "scrap room." Eglomise regularly donates or sells scrap paper and other excess craft materials to local schools. It also cuts scrapframing materials into smaller, usable frames, which it sells for low cost.

made it easy for him to get other employees involved. The Devens facility, which employs 105, is one of nine packaging plants operated by the Hauppage, NYbased parent. At Devens, Southern Container's EcoStar endeavors include simple things such as recycling cans, white paper, and waste cardboard. Broken pallets go back to the vendor for rebuilding.

"Every time something goes into the waste stream you have to pay to take it away," says McGuigan. All but 2 percent of Southern Container's product ends up being recycled into more product. It recycles 100 percent of its waste and its customers recycle high amounts of theirs. It's not just for the green, he says - it's becoming competitive. "As a supplier, if we don't help customers reduce waste to levels they need, someone else will," he says.

McGuigan has also brought two senior year WPI engineering students into the

EcoStar program. Chris Bartlett and Craig Vanis have built their Major Qualifying Project on improving operations at Southern Container, Their suggestion that boilers be run continuously but on low-fire in off-peak times, rather than being shut down every weekend, has resulted in fuel savings because the boiler uses less gas on low fire.

Tangible benefits

Eglomise Designs Inc. makes commemorative items for colleges, sports teams and the children's market. Its mirror clocks are sold through high-end retailers. Owner Martha Demerjian says the company gives high-quality paper stock to schools to use for art projects (she invites interested schools to contact her; see "Web resources"), and recycles as much of its incoming packing materials as possible. It uses scrap mirror instead of lead to weight the bottom of its commemorative clocks. Additionally, when the high quality wood frames it uses for the mirror clocks don't pass inspection, they're cut down and made into smaller sizes which are sold to the general public for a few dollars a piece one or two times a year.

Demerjian, who not only works at but lives at Devens, says that though she sees the enrollment process for EcoStar as a "chip by chip process to get people on board," she also thinks there's tangible economic benefit to having a comprehensive environmental program in place. In addition to the cost savings of using recycled material instead of buying new, there's the increase in value in property value at Devens that she feels reflects the high quality of the land use initiatives.

Getting the word out

The next step will be to get the word out to the surrounding communities about how they, too, can participate in the EcoStar process. Heidi Ricci, senior policy specialist at Massachusetts Audubon and a resident of Shirley, says she thinks Devens would have gotten more participation in a recent hazardous waste collection day from Shirley residents if it had publicized it more. However, "I've been impressed by what they've done so far," she says. "It's not just green stamp of approval that gives the company good press. I think there can also be some real benefits."

McGuigan expresses a similar sentiment. "There are million-dollar speeches, but if no one asks you to give them, you never get paid," he says. "We need to be able to market better the value of the enterprise."

But the program has already contributed to positive change. Its initiatives, states Lowitt, "have reduced the mental distance between firms at Devens. Many of the firms now see themselves as part of a system of industries."

Devens is still listed as a Superfund site but with cleanup almost complete, will soon seek removal from the list. "EcoStar is a journey in the right direction," McGuigan says. "You can't judge by speed. You have to judge by impact.'

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Web resources:

- Devens Enterprise Center: www.devenscenter.com
- Devens Enterprise Commission: www.devensec.com
- Eglomise Designs Inc.: www.eglomisedesigns.com
- Southern Container Corp. www.southern-container.com

AT A GLANCE **DEVENS**

Acreage: 4,400, with 1,800 slated for redevelopment and 2,600 to remain undeveloped

Cost of clean up: \$140 million to date

Public investment. state: \$143.8 million to date

Private investment: More than \$435 million to date

Number of businesses: 80+

Number of civilian jobs lost in **1993** decommissioning: 2,871

Number of jobs created under **Devens Reuse Plan:** 4,000+