MULTIPLE MARKETS

WOOD PROCESSOR PROFITS FROM DIVERSIFICATION

Wood residuals are used to produce compost, mulches, and soil blends that are then sold to wholesale buyers throughout southeast and north Texas.

Texas firm serves a variety of municipal and private generators to create a critical link for value-added products.

Molly Farrell

BEFORE selling its solid waste management assets three years ago, Waste Reduction Systems, Inc. (WRS) of Houston, Texas decided to keep its wood recycling division. Since then, that division has steadily grown and now includes: Municipal yard trimmings grinding; Industrial wood processing; Organic products; Playground surfacing; Particle board furnish; Utility vegetation management; Land clearing debris processing and storm debris management.

The company was founded by William Winters in 1985 to sell and rent industrial waste compaction equipment to Fortune 500 companies. Over the next 13 years, WRS expanded to include two waste collection and transportation companies, two commercial material recovery facilities, four permitted landfills, two transfer stations and a solid waste and material handling equipment distribution company. WRS owned and managed the largest privately-held MSW landfill in Houston, and developed a partnership with the Southern Brazoria County Clean Cities Coalition to manage solid waste and recycling operations in a five-county area in Texas.

In 1998, WRS sold its solid waste collection, transfer, recycling and disposal assets to USA Waste. "We kept the wood business because wood was a large percentage of the waste stream we were recovering," says Winters. That year, WRS was renamed Novus Systems Inc., and the wood division became the Novus Wood Group. "Novus is the Latin word for new, and we thought it better reflected our business philosophy," he explains.

Novus Systems also has alliances with four other companies. WoodFuel.com, LP, formed in April 2000, markets wood fuel to power producers through a database of 5,000 suppliers. BioLea$e, LP provides equipment financing to operators of wood processing facilities. Rustin Transportation Company operates nine solid waste transfer stations in Texas and provides transportation services for the Novus Wood Group. Continental Biomass Industries (CBI) manufactures wood processing equipment.

The company currently processes 1.5 million to 2 million yards of woody residuals annually. Its customers include large wood debris generators such as public utilities and municipalities, and wood-intensive industries including manufacturers of pallets, crates, furniture, doors, and building components.

The organic products division supplies wood fuel, horticultural items, playground surfacing, organic erosion control materials, and particle board furnish. "By keeping our materials source-separated and developing specific, value-added products, we reduce costs to the supplier of the material and avoid landfill disposal," says Winters.

WRS first focused on selling wood residuals as boiler fuel to pulp and paper industries in southeast Texas. It had been sorting wood out of Houston's commercial stream including large quantities of dry pallets and crating. "We would grind the pallets and crating into two to three inch minus material and sell it for boiler fuel," he adds. Pallets and crating are collected separately and are not used in the company's horticultural or playground products.

Next, the company began to focus on assisting municipalities with tree trimmings and yard trimmings debris. "We established programs where the city would collect the material and bring it to a location where we would grind it. We work with the solid waste directors to improve collection efficiencies and provide incentives to deliver clean raw material," continues Winters. Since 1993, Novus has processed more than 200,000 cubic yards of wood and brush for the cities of Pasadena and Lake Jackson, Texas.

Most wood residuals are made into compost, native and colored mulch, and soil blends, which are sold to wholesale buyers throughout southeast and north Texas. Products are delivered to buyers in tractor-trailer loads, and then marketed wholesale, retail and in bags.

COMPOST SERVICES AND POWER GENERATION

Novus Wood Group provides turnkey leaf and grass composting services to municipalities in southeast Texas and currently has

About 800,000 cubic yards of organic materials have been processed into products from trimmings (left) at power line locations (below).

about a dozen customers. "Composting is an important part of the product mix but is not a large part of our business," notes Winters. To reduce hauling costs, the company backhauls bark, sawdust and shavings from pulp and paper mills. "Freight is our largest expense. We have to deliver products cost effectively, so we have established alliances, in addition to our own freight infrastructure, to transport raw materials and wood products."

Novus has been processing power line trimmings for Reliant Energy, a Houston-based electric utility, since 1993. Power line trimmers had been hauling the trimmings to a central processing location where it would then be processed and hauled away. To reduce costs, drop-off locations were set up throughout the Houston metropolitan area on properties owned by Reliant. Since 1993, Novus has diverted approximately 800,000 cubic yards of organic material for Reliant.

One Novus product, Eco Dune, is made from power line trimmings and other organic materials to help protect coastal areas from beach erosion and reduce property damage caused by storm surges. Eco Dune is spread along beaches in windrows 12 feet wide and four feet high. Windblown sand drops down into the Eco Dune material, building mass and creating a new dune. "We've found that it helps create dunes faster than discarded Christmas trees or sand fences and is more attractive than other alternatives," says Winters. In April 2000, Novus received approval from the Texas Parks and Wildlife Department to install Eco Dune on Galveston Island as part of a dune restoration project.

STORM DEBRIS MANAGEMENT

Its Storm Debris Management Division has processed wood debris from a number of large storm events including two ice storms in eastern Texas and Louisiana, a tornado in Sugar Land, Texas in 1997, and Hurricane Georges in New Orleans 1998. The company now has worked on storm contingency plans with a number of utilities and municipalities such as Reliant, Entergy of New Orleans, Texas-New Mexico Power's southeast Texas service area, and Deer Park, Texas. Explains Winters: "We help our customers plan in advance so they know what it will cost prior to the event, how to collect the debris and where to store it so that we can process it. One storm can produce a million yards of material or more, so we work with local officials to secure large paved areas like airport runways and other areas a city may own where the debris can be efficiently brought for processing."

Usually, a local collection company will clear the debris off streets after it has been removed from the power lines. Novus then processes the debris at one or several locations and transports it to markets. "We have reliable markets for the end product, eliminating the possibility that municipalities end up with big piles of unusable material," says Winters.

The Wood Group uses five portable horizontal grinding mills including four Model 4800 CBIs and a Model 4000 CBI for finished product. A CBI prescreener helps prevent contaminants in wood debris from damaging the grinder. Two portable Power Screens and a portable ReTech screen are moved from site to site depending on the product.

PLANS FOR THE FUTURE

Novus Wood Group has been exploring expanding operations into other parts of the country. "Our wood collection business is self-sustaining because we're creating value-added products from the materials we gather," continues Winters. "We're now trying to grow that concept geographically. Our strategy is to go to areas where there are tremendous amounts of wood materials." Expansion plans include organizing a nationwide network of companies that offer wood collection, processing and screening services to municipalities, public utilities, the forest products industry and large wood-intensive businesses. "Our strategy is to engage in long-term contracts as an outsource vendor for municipalities that generate yard waste, and power line companies that have tree trimmings."

One expansion challenge is having enough equipment on hand for storm events. "Normally, you can process 300,000 yards of material annually per machine, but with a big storm, you can get two to three times that amount of material, and you can't have idle machines standing by for storm events. No single contractor can handle it effectively, so organizing an alliance of qualified processors is the key." Freight constraints cause storm debris cleanup to be a local business. "You can't afford to ship the material more than 150 miles, so you have to find and develop markets that are local," he sums up. "We've already been through the learning curve, so we'll organize the network. We feel that we're right at the beginning of the opportunity bell curve in the wood products business." ■