



Sorenson BioScience, Inc. Sustainability Initiative

Go Green! Sorenson BioScience is committed to sustaining the environment through new, innovative products and manufacturing processes.

Our commitment:



Products are environmentally sustainable – New **e•dek** tips are packaged in 100% recyclable paper board racks, **QuickRack** tip reload systems allow you to re-use plastic racks, and **bulk** tips contain minimal packaging. In addition, other product components can be re-used for trays or plate holders in the lab.

Re-use plastic waste – Plastic waste generated in the manufacture of primary products (tips, tubes, plates, etc.) is used in the production of secondary products (racks and lids). Any waste plastic not utilized is sold to other manufacturers that make bakery trays, nursery planter trays, ammo boxes, funnels, and other misc. applications.

Utilize electric presses – All new molding presses are electric compared to hydraulic presses used in the past. There are many advantages to using electric presses:

- Make better quality products.
- Save 80% on electricity costs.
- No harmful hydraulic fluid.
- Reduce noise pollution.
- Less scrap generated.

U.S. manufacturing – 100% of all manufacturing is done in the United States and subject to and compliant with U.S. environmental and labor regulations.

Small manufacturing carbon footprint – Every aspect of manufacturing occurs within a 10 mile radius. This includes assembly and outside services such as sterilization. Very little energy is expended to ship product during its different stages of production.

Recycle water – Water used for cooling is recycled and only replaced due to evaporation.

Environmentally sustainable raw materials – Cardboard boxes are made from 55-70% post consumer recycled materials, moving towards using FSC certified papers for packaging, and environmentally sensitive inks and adhesives.

Fluorescent lighting – Used throughout production and office areas.

Renewable energy – Sorenson BioScience's energy is supplied by Murray City, a small municipality servicing 16,000 customers. A significant portion of the energy supplied by Murray City is derived from [renewable resources](#).

Supplier packaging recycled – Cardboard boxes from suppliers are collected and recycled by a local recycling company.

Re-use products — Expired or obsolete products are frequently donated for educational instruction.

Innovative culture – Sorenson is continually seeking cutting-edge technologies and materials that will lessen our impact on our Earth.

Visit www.sorbio.com/green to learn more about Sorenson's commitment to sustaining our planet.

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Murray City Power meets its match in landfill powerplant

One of the tricks to adding renewable energy to a power supply portfolio is finding the right fit, even if it comes from unexpected sources. [Murray City Power](#) found the low-cost, reliable source of renewable electricity it was looking for at the dump.

By the end of the year, the only public power agency in Utah's Salt Lake Valley expects to be receiving 3 megawatts of electricity from the [Salt Lake Valley Solid Waste Management Facility](#). "We had looked at buying wind power in 2003," said General Manager [Gary Merrill](#). "At that time, the project then being considered just wasn't sufficiently compatible with our needs."

A lot of people think that landfill-gas-to-energy is a good match for Murray. "I've gotten encouraging calls from residents, and strong interest from the media. The Sierra Club wants to do an article on the project for their newsletter, and the *Salt Lake Tribune* has given us a lot of positive coverage," Merrill said.

Giving credit where credit is due, he added that the stories have focused a little too much just on Murray City Power. "It took a lot of stakeholders to make this project happen, especially Murray's City Council for their approval of the contract, and the joint owners of the landfill, Salt Lake City and Salt Lake County."

Buyer needed to move project forward

City officials signed the contract with Salt Lake Energy Systems, LLC earlier this summer. "There are still a few hurdles to clear," said Merrill, "but we've done our part."

Murray City Power's part was to provide a market for the state's third landfill-gas-to-energy project. The other two facilities tapping landfill gas are [Hill Air Force Base](#) and a South Jordan, Utah, brick manufacturer that uses the gas to fire its brick furnaces.

Salt Lake Energy Systems bought the gas harvesting rights and is installing the necessary equipment at the landfill to generate electricity from the methane. The company is a partnership between two out-of-state companies with proven experience in landfill development, [Landfill Energy Systems](#) of California and Michigan-based [DTE Energy](#). The partnership was exploring a number of ways to use the gas, including industrial applications. "Our power purchase contract provides the revenue stream which enabled them to invest in the generating equipment with a reasonable return on the investment," Merrill explained.

Merrill first learned of the landfill project at a meeting of [Utah Associated Municipal Power Systems](#). Salt Lake Energy Systems presented a proposal to UAMPS members to see if any of them were interested in buying electricity from this renewable resource. Usually, UAMPS requires that more than one member participate in a project, Merrill noted, and the projected 3-MW capacity divided up wouldn't amount to much. "So, other than Murray, there wasn't a lot of interest, and we forged ahead on our own," he said.

Resource fits city's needs

For a utility with only 16,000 customers, however, 3 MW will be a significant addition to its renewable portfolio. The city already owns a run-of-river small hydro plant that supplies 5 MW that it blends into its power supply. Other sources include hydropower from Western, coal-fired plants in Utah and New Mexico,

power contracts from Idaho, and a city-owned 40-MW natural gas peaking plant located in Murray.

The landfill gas will not be marketed separately either, said Merrill. "The added administrative costs of a green marketing program are not worth it to a utility of our size," he explained.

The purchase will only add about 45 cents annually to customers' electric bills, compared to other resource options. The power supply's accessibility helped to make it affordable. "I knew we wouldn't have to negotiate a stand-alone transmission agreement to get it," said Merrill, referring to Murray's transmission access through the UAMPS statewide transmission agreement.

Another thing that made landfill energy attractive was that it is an incremental addition to existing resources to meet continued load growth. Intermountain Healthcare Corp. is building a six-building hospital complex in the center of town. When completed in fall 2007, the campus will add eight to 10 MW to the utility's current 100-MW load, with a load factor of more than 80 percent.

"Hospitals have a great load factor," Merrill noted. "It will be using power in the middle of the night and paying retail rates for a supply already in place. That's a perfect fit for a 24/7 resource like a landfill powerplant."

Small utility shows big commitment

The hospital is only a single customer, though, said Merrill, and he doesn't talk about how many homes 3 MW can power, either. He prefers to point out that the landfill is generating twice as much power as it takes to run Murray's municipal buildings and streetlights. "That links the purchase to the city's commitment to proactive environmental stewardship," he said.

Environmental stewardship is not about "being against anything," Merrill explained. "It simply means that we recognize the challenge of balancing the community's power needs with least-cost and least-impact options."

Those options include continuing to look at other alternative energy sources. Going through the economic analysis for the wind power project made the value of renewable energy clear, Merrill said. He is "just starting to snoop around about distributed solar generation," he added. "We haven't formally pursued it yet, but it might be another viable power supply option."

The utility has implemented rates that promote energy conservation and efficiency, and all the vehicles in its administrative fleet are hybrids. In the past 25 years, Murray City Power's tree-planting program has planted more than 17,000 trees with more than a 90-percent survival rate. The utility has actively participated in research on the Salt Lake Valley air shed with the University of Utah. "We've accomplished a lot for a utility our size," Merrill stated proudly.

He hopes that Murray City Power will serve as an example to other small utilities. "They might look at us and think, 'If a little utility in the middle of Utah can accomplish all that, why not us?'"