Components of light bulbs, electronics sent to manufacturers for reuse

The security that surrounds the Veolia Environmental Services facility on Mineral Springs Drive does little to disclose the down-to-earth mission being accomplished behind the barbed-wire fence.

Plant General Manager Kevin Shaver explained that the 10,000-square-foot building in Port Washington's industrial park is a vital link in recycling many everyday appliances.

"We process 40,000 fluorescent light bulbs and ballasts a day," Shaver said.

For many of the 40 people who work at the plant, processing involves reducing the bulbs to reusable raw materials — glass, wiring, circuit boards and metal caps.

The reason for the security precautions, Shaver said, is that mercury, a hazardous material, is also recovered from those tubes in significant quantities.

Because mercury is highly toxic after prolonged exposure, workers who "demanufacture" the bulbs wear protective clothing and full masks. The production area is carefully monitored to ensure the mercury does not escape into the air.

Although only minute amounts of mercury are used in the powder that coats fluorescent tubes, the accumulated volume typically equals 12 to 15 metric tons a year.

That volume also includes liquid mercury recovered from common medical devices, such as thermometers and blood-pressure machines.

Many of the other materials gathered at the plant are far less volatile, but still have no place in a landfill. Electronics, computers and light fixtures are all broken down to raw materials and shipped to manufacturers who want them.

“It seems odd for someone who works for one of the largest trash collectors in the world to say, but our mission is to keep reusable materials out of the landfill,” Shaver said.

Most Ozaukee County residents know Veolia as the company that handles their curbside trash and recycling collection.

However, Shaver said, the French-owned Veolia Environnement is a global enterprise with more the $37 billion in annual revenues. It is the world’s largest environmental services company, operating power plants, water treatment facilities, trucking operations and waste collection.

“We operate as a pretty quiet company in the Port Washington industrial park, but Veolia brings a lot of expertise and is committed to being involved in the community,” Shaver said.

Part of that commitment includes offering free recycling of hazardous materials such as household chemicals to residents of the City of Port Washington every Monday from 8 a.m. to 5 p.m. That service draws between 30 and 50 people a week.

Residents of other communities can bring hazardous waste to the plant, but they are charged by the pound.

Most of the materials, however, come to the facility from big-box retailers or manufacturers that are making large-scale changes on their light fixtures or switching to energy-efficient LEDs.

“The companies know that fixtures start losing their efficiency after a certain number of years and make a complete changeover in the building,” Shaver said.

That equates to truckloads of bulbs and tubes coming in from all over the

Midwest.

Earlier this year, the operation also began leasing additional space in one of the former Bolens manufacturing plants in Port.

“Not only do we help people recycle electronics and hazardous materials, we are also helping the city by recycling an old factory,” Shaver said.

WORKERS AT THE Veolia Environmental Services plant in Port Washington wear protective clothing while processing fluorescent tubes containing toxic mercury. Photo by Mark Jaeger