

## Landfill Gas-Generated Power

Klickitat PUD (KPUD) is fortunate. We have the fourth-largest landfill in the United States, located just outside of Roosevelt. Not everyone thinks of this as good fortune, but an optimist would say it is indeed.

Landfills are necessary, and Rabanco's Regional Disposal Company (RDC) provides good jobs for more than 150 people. They operate a state-of-the-art landfill—one of the best in the country. From the very conception of the landfill, RDC envisioned energy recovery in conjunction with other state-of-the-art recycling programs.

An integral part of the landfill is a methane recovery system that is significantly enhanced from the bare requirements needed to meet modern-day permits. KPUD turns this recovered methane into electricity, which is said to be the ultimate in recycling. Today's garbage returns to you tomorrow when you turn on your light switch.

Actually, it's not that instantaneous or sustainable.

I wanted to know the specifics about how many households it takes to generate enough garbage to support electrical generation for a single household, so I called Matt Henry, manager of the RDC Landfill. It turns out it takes about 1,000 tons of garbage to sustain generation for one kilowatt. The average person generates 4.5 pounds of garbage a day, and the average household uses 1,000 kilowatt-hours each month. When you run through all the math, the answer is it takes 20 households to generate enough sustainable electricity for one household. Still, this is huge.

In other words, if all garbage was handled the way KPUD and RDC handle it, more than 5 percent of the households in America could be supplied electricity in this manner.

This was brought home to me recently when The Oregonian ran an article on the Columbia Ridge Landfill across the river in Arlington. In the article, the owner—Waste Management—laments that “the methane has not materialized.”

Yet, just across the river at RDC's landfill, we produce enough electricity to power more than 7,000 homes, with less waste. Everything I have seen says they really are not all that interested in actually capturing the methane. Yes, it does take effort and detracts from RDC's primary business of disposing of garbage, but in the end it certainly seems worth it.

**Tom D. Svendsen, General Manager**