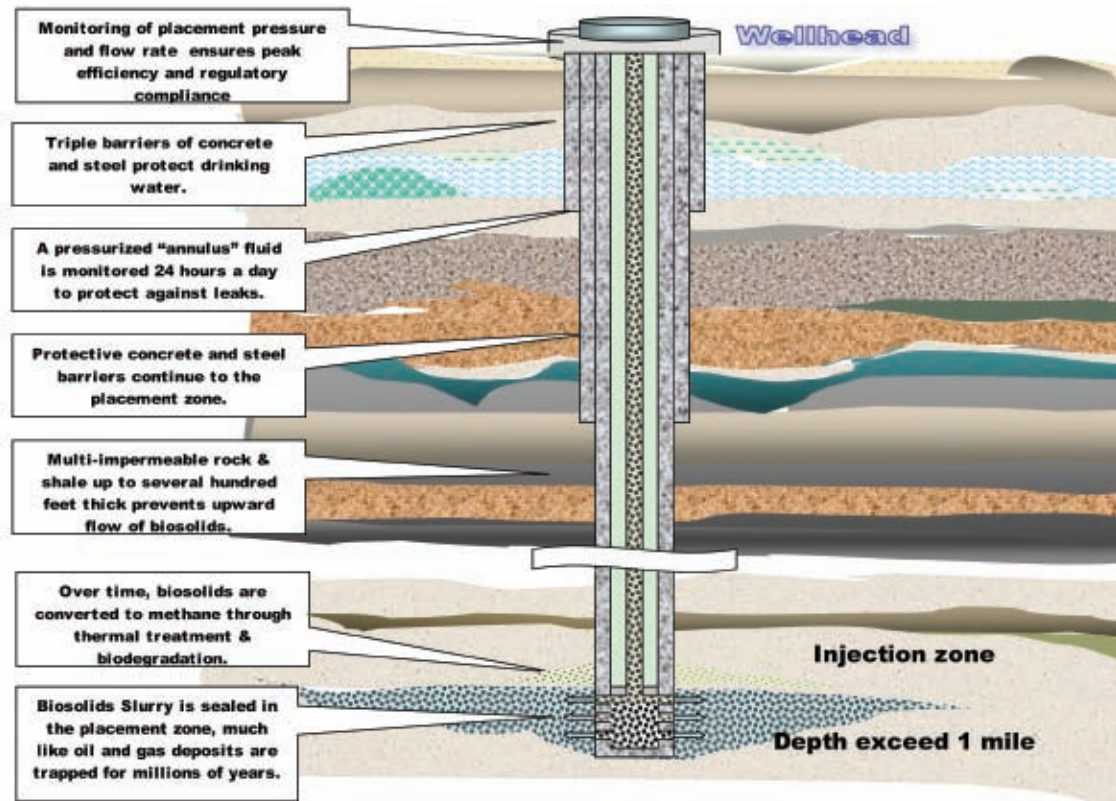


LEADING THE WAY

"The project could establish a precedent whereby the experience relating to deep injection disposal of biosolids residues, and establishment of a favorable regulatory climate, could encourage other municipalities, both in the United States, and elsewhere to take advantage of favorable geologic conditions to dispose similarly of locally generated biosolids. The pioneering of deep injection disposal of treated biosolids by the City of Los Angeles could therefore pave the way in eventually providing economic benefits and a cleaner environment to millions of citizens of major cities throughout the world."

*John Apps,
Senior Scientist Emeritus,
LBNL*



TERMINAL ISLAND RENEWABLE ENERGY PROJECT

Our Bureau has been researching the feasibility of injecting biosolids into deep wells to produce an environmentally-safe, renewable source of energy. Our goal is to diversify our options for managing biosolids with proven safe and beneficial resource recovery programs.

The Terminal Island Renewable Energy Project concept is to place biosolids in depleted oil and gas reservoirs more than a mile underground. There, the earth's high internal temperatures and pressures form methane gas from the organic matter in the biosolids – much like oil reserves formed from prehistoric creatures and plants. Carbon dioxide is also produced, but this greenhouse gas stays trapped in the deep subsurface through sequestration. Within a relatively short period of time, we can recover a steady supply of methane for use as a source of renewable energy.

Estimated volume of energy that could be produced from deep well injection: **3,500** kilowatt hours (kWh) per year.

Estimated value of that energy:
\$2,400,000 per year.

By comparison, in 2001, 107 million U.S. households consumed **1,140** billion kWh.