Bioreactor Layout
Operational Experience

- Leachate seep
- Exposed cap damage
- Recirculation frequency
- Winter operations
- Biofilter odor control
- Pump efficacy
Data Collection

- Data collected and frequency
  - Temperature (daily)
  - Subsidence (quarterly)
  - Recirculation pump data (daily)
  - Liquids addition (as added)
  - Leachate data
  - LFG data
Data Collection

- Data collected and frequency (con’t)
  - Leachate head
  - 2003 Flowmeters installed
  - Time capsules (1-2 per year)
  - Leachate discharge flow rate in 2003
Results

- Temperature data
- Subsidence
- Leachate data
- LFG data
- Time capsule
Subsidence Data

Depth of Waste (feet)

Cell A Trendline

Cell B Trendline
Leachate Data

- **COD**
  - 2001: 560 to 2,500 mg/l
  - 2002: 2,600 to 2,900 mg/l

- **Volatile Acids**
  - 2001: 1,000 to 1,600 mg/l
  - 2002: 175 to 380 mg/l