Coffin Butte Landfill
A Regional Landfill Owned and Operated by Republic Services
Location

- 28971 Coffin Butte Road
- On Hwy 99 about 7 miles north of Corvallis
- Monday-Saturday, 8am-5pm
- Serves Benton, Linn, Polk, and Marion Counties
History

- WWII dump site – Camp Adair 1944-45
- 40s – 70’s – clay foundation laid
- 80s - Regional landfill, subtitle D, RCRA*

*The Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. The law describes the waste management program mandated by Congress that gave EPA authority to develop the RCRA program.

- 2000 – Allied Waste Procured landfill
- 2008 – Allied Waste – Republic Services Merger
Current
What is a cell?

- Leachate collection
- Life span
- Cells
- Liner heat welded, pressure/stress test
- ADC
Cell Design

CONCEPTUAL LANDFILL DESIGN CROSS SECTION

OFFICE/MAINTENANCE BUILDING
LEACHATE COLLECTION SUMP
WORKING FACE

GAS EXTRACTION WELLS
LEACHATE STORAGE TANK

GAS FLARE STATION
STORMWATER RETENTION POND
GAS MONITORING PROBE

STORMWATER DRAINAGEWAY
GROUNDWATER MONITORING WELL

REFUSE
PROTECTIVE LAYER
DRAINAGE LAYER
LEACHATE COLLECTION PIPE
60 MIL HDPE GEOMEMBRANE
COMPACTED CLAY
SUBGRADE

LINER SYSTEM

FINAL COVER SYSTEM

VEGETATIVE COVER
PROTECTIVE COVER
GEOCOMPOSITE
40 MIL HDPE GEOMEMBRANE
COMPACTED CLAY
INTERMEDIATE COVER
REFUSE
Gas Collection System

• 275 Gas Collecting Wells located on Coffin Butte Landfill
• Gas goes to PNGC, energy co-operative.
• Landfill Gas collected powers 5 large generators.
• Enough gas is collected to power 4,000 homes annually.
• Coffin Butte was the second landfill in Oregon to install a gas collection system.
• A flair, located at the PNGC facility removes any excess gas.
Energy Generation
Monitoring and Other Requirements

- Ground and surface/storm water
- Air quality
- ADC 12”
- Leachate collection/disposal
By the Numbers

Regional Landfill

- 780 acres in total
- Waste on about 250 acres
- 3 restored wetland areas
- 2 leachate collection ponds, collecting 25-30 Million gallons per year.

- 4,000 tons of waste per day
- 1,000,000 tons/year, including:
  - MSW: (Municipal Solid Waste)
  - C&D: (Construction & Demolition Waste)
  - Special Waste: Asbestos, Industrial Waste, Environmental Clean up, Contaminated Soils and sludge from waste water treatment plants.
MSW & Special Waste

- Municipal Solid Waste
- Special Waste
  - Asbestos
  - Industrial Waste
  - Environmental Cleanup Material
  - Contaminated Soil
  - WWTP Waste
Life Span and Future

**Knife River:** Currently mining our next cell on the West side of the landfill.

**Life Span:** *30 - 50 years*
*Reducing, Reusing, and Recycling play a big role in extending the life span of Coffin Butte.*
Recycling

- Commingle
- Glass
- Cardboard
- Tires*
- Oregon E-Cycles
- Car batteries
- Motor oil
- Appliances*
- Yard debris*
- Scrap metal

*for a fee
Beyond the Landfill

• **Secure Your Load initiative** – in partnership with Benton Count, Republic promotes the Secure your Load day, where customers who have properly secure loads receive a free ratchet strap. Future Plans in the making.

• **Litter Pickup** – monthly Republic Services and Benton County employees work together to ensure the road near the landfill is clear of debris.
Questions?