

Cinder Lake Landfill

Landfill Life and Closure

- Closure originally estimated to be in 2024
- Purchased additional land, extending life to 2042
- Life is now extended to 2054++
 - Use of sludge and green waste as Alternative Daily Cover (ADC)
 - Recycling/Diversion Programs
 - Household Hazardous Products Center
 - Better compaction & efficiencies
 - Identification of additional airspace
 - Sunday closure
 - New technology/GPS/Heavier Machines
 - Future Projects
- Increased diversion, efficiencies and compaction, as well as advances in methodology will likely extend that projection even further.

Paper Sludge

- SCA paper sludge, once buried as trash, has been re-purposed for use as Alternative Daily Cover (ADC).
- Surplus stored for future use, minimizing the need to import soil.

Green Waste/Wood Waste

- These materials are ground and mixed with the paper sludge as ADC.
- Ground green waste is also available to residents free of charge for use as garden mulch.

Recycling Programs

- Our program diverts paper, cardboard, plastic, metal, and glass.
- Annual diversion is approximately 10,000 tons.

Hazardous Products Center

- The Household Hazardous Products Center receives many different materials such as:
 - Paints
 - Solvents
 - Chemicals
 - Batteries
 - Electronics/TVs
 - Fluorescent light bulbs
- Annual Diversion of approximately 183 tons.

Revisited Landfill Operations Techniques

- Use of cover
- Slope design
- Minimized tipping area
- Segregated residential and commercial users
- Tracking compaction rates

Resurveyed Landfill Footprint

- Identified 2 unfilled areas
 - 1st area gained 4 months of use
 - 2nd area estimating 1 year of use

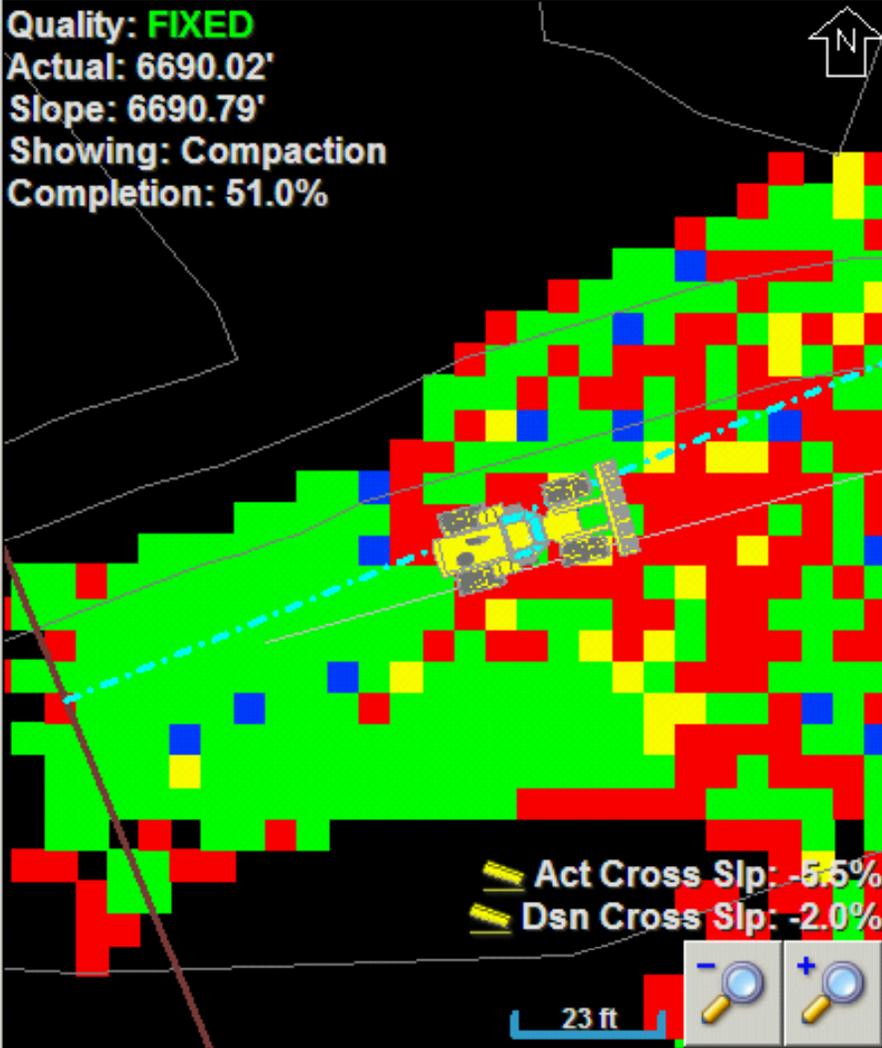
Sunday Closure

- Closure in July 2012
- Operational cost savings
- Estimated 2.5 years of additional life

Equipment

- In 2012 the landfill purchased a larger, heavier trash compactor.
- Increased compaction rate.
- Added GPS monitoring technology to compactor.
- Greater efficiencies, better compaction, and increased landfill life.

Quality: **FIXED**
Actual: 6690.02'
Slope: 6690.79'
Showing: **Compaction**
Completion: 51.0%



FILL
0.80

Other Projects

- South Borrow Pit mining and excavation
- If successful, excavate remainder of landfill
 - Mining a section adjacent to the South Borrow Pit
 - Recover needed soil for cover material
 - Reclaim metals for recycling
 - Cost to expand the depth of expansion areas
- Use of paper sludge as liner/closure cap
- Pursue realignment of landfill boundaries

Septage/Kitchen Grease/oil (liquids, non hazardous)

- An email response from ADEQ: “Although “sanitary waste in septic tanks” is included as part of the definition of “household waste” in 40 CFR § 258.2, septic waste is prohibited from disposal in a municipal solid waste landfill under the Liquids Restrictions in 40 CFR § 258.28(a)(1).” There are facilities that do receive septage, but they are not municipal solid waste landfills and fall under different regulations and permitting requirements.
- When a commercial business collects kitchen grease, it must pass the paint filter “free liquids” test and be non-hazardous to be disposed of in the landfill. For liability concerns, this would probably require the generator to provide a representative sample sent to a certified lab for analysis. A screening procedure would have to be developed to ensure the product is acceptable.



CITY OF FLAGSTAFF
PUBLIC WORKS
SOLID WASTE

CINDER LAKE LANDFILL
(Site Designated 1974)

Property Boundary / Fence
Existing Landfill Footprint
Cell Boundary
Expansion Area