# Yours Truly

# Lee's Summit Solid Waste History

Public Works Committee
July 18, 2017



# **Sanitary Landfill Basics**

- A landfill is a permitted, engineered space for waste (trash) disposal
- The Missouri Department of Natural Resources (MDNR) is the state agency with regulating authority over landfills
- Many factors impact how long the landfill airspace will last (a.k.a. landfill life)
  - Waste compaction (how well the trash is squished)
  - Waste acceptance rate (how much trash comes in, and how much is diverted/recycled)
  - Soil use (amount of soil used to cover the trash)



## **Landfill Basics**

- A landfill generates methane (gas) and leachate (liquid), which must be managed by various systems
- When a landfill can no longer accept trash (it has reached permitted capacity), the landfill undergoes closure (soil and vegetative cap)
- After a landfill has been certified as closed by MDNR, it must be maintained and monitored for at least thirty years (called post-closure)



#### **Pollard Landfill**

- Private landfill north of Strother Road
- Pre-dated MDNR
- Closed in the late 1970's, about the time Missouri solid waste regulations were being written





#### 1978 Bond Issue

- Few local disposal options
- \$750,000 GO Bond issue 20 year landfill
  - approved by LS voters
- \$250,000 Jackson County contribution
- Funding was for site selection, engineering, permitting, and construction



### 1982 LS Municipal Landfill opened

- Enterprise Fund
- Serving LS and unincorporated JA CO only
  - Received about 60 TPD
  - Six days a week
- Three employees
- Operated in the "red" the first several years
- Expected closure in 2001



#### The late 1980's

- Landfill was opened to all
- Tonnage increased dramatically
- Operated in the black



#### The 1990's

- Landfill is filling up fast close before 2001
- First recycling center opened
- Yard waste/composting opens
- SB 530 mandates 40% diversion
- City seeks re-permitting of landfill
  - Horizontal
  - Vertical



## The 1990's (cont.)

- Landfill is re-permitted
  - Minimum 20 year life = 2014
  - Use price for volume control
- Recycling center is moved
- Citizens Recycling Task Force formed (1994)



## The 1990's (cont.)

- BOA moves forward with first set of recommendations from Task Force (1995)
  - Hire Recycling Coordinator
  - 2 year intent to enter hauling business
  - Establish hauler license
  - Require haulers to offer recycling
  - Staff to promote recycling
- Diversion rate at the time = 25% (still working toward goal of 40% per SB 530)



## The 1990's (cont.)

- Renamed Resource Recovery Park (RRP)
- Household Hazardous Waste (HHW) facility opens (1997)
- City Council's SWC directs staff to explore Pay as You Throw (PAYT) (1999)
  - Volume based pricing
  - Survey citizens regarding Solid Waste issues
  - Not well received by hauling community



#### The 2000's

- Public Disposal Area (PDA) constructed
- More recycling opportunities
  - At RRP
  - Electronic recycling events
- North Recycling Center opened (2008)



## The 2000's (cont.)

- Solid Waste Management Task Force (SWMTF)
  - Created by Res. 05-12
  - Ten citizens representing citizens and business
  - Met for nine months
  - Purpose: Should Lee's Summit remain in the solid waste business after the closure of the landfill in 2014?



## The 2000's (cont.)

- SWMTF recommendation (2006)
  - Lee's Summit should continue to operate a landfill
  - Initiate study to identify a new location
    - Suitable for Lee's Summit waste
    - Explore feasibility of a regional landfill
    - Explore ownership and operations options
  - Should City decide <u>not</u> to proceed with landfill: Transfer station would then be recommended if economically feasible
- Consultant hired for site selection of second landfill (a.k.a. Landfill II) (2008)



#### 2009 and 2010

- Consultant begins Landfill II Site selection
- Two potential sites identified
- Solid Waste Consortium formed (Res. 10-10)
- Consortium reviews:
  - Governance
  - Business model
  - Operations



#### The 2010's

- City Council rescinds support of Consortium (Res.12-11)
- ENR evaluates other solid waste options
- City issues RFP to explore solid waste options (2013)
  - Proposal written to be wide open
    - Private operation
    - Public/Private partnership



## The 2010's (cont.)

- Three proposal received (2014)
- Highest ranked proposal:
  - Run landfill and all environmental programs
  - City sets gate pricing, controls own royalty component
  - Flow control required
  - City to construct transfer station after landfill closure



## The 2010's (cont.)

- Indication that Council was not prepared to proceed with flow control; taken off table (2014-2015)
- Negotiations continue w/o flow control
  - Modified proposal with more risk to City and vendor
- Staff rejects proposal; vendor appeals to Council for reconsideration



## The 2010's (cont.)

- Contract executed (1/2016)
  - Phase 1: Run landfill & some environmental programs
    - Purchase equipment; proceeds for Transfer Station design, permitting, and construction
    - Closure/post-closure contribution
  - Phase 2: Run transfer station
  - Perform landfill closure
- HES assumed operation (3/1/2016)



## Today

- HES contract underway; staff managing
- Per HES contract, vertical expansion for landfill submitted and approved by MDNR for +/- 3 years
- Transfer Station
  - Public Open House (June 2016)
  - 30% plans complete (November 2016)
  - Contractor cost estimate (December 2016)
  - Negotiation to cover estimated overages in accordance with contract



## Questions



