Small Arid Landfill Meeting
March 19, 2009
Garden City

Co-sponsored by

KDHE Bureau of Waste Management
Kansas Association of Counties

KDHE Mission: As the state's environmental protection and public health agency, KDHE promotes responsible choices to protect the health and environment for all Kansans.
Why are we here?

- It’s been 10 years since last SAL meeting
- To review recent KDHE observational concerns at SALs
- To review current permitting issues
- To help owners of SALs operate more efficiently and effectively
- To meet your inspectors and permit engineers
- To dialog with other SAL owners
What is a ‘Small Arid Landfill’?

- Disposes less than 20 tons of MSW per day (annual average)
- In an area that receives less than 25 inches of precipitation per year
- Has no practical disposal alternative as judged by county commission
- Has no evidence of groundwater contamination caused by landfill
1994 – SAL/Subtitle D Rules Apply

County or City-Owned Landfill
Subtitle D Standards apply due to size

25 inch average annual rainfall line

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- Groundwater Contamination – lost SAL exemption
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- Built new SAL (within few years)

25 inch average annual rainfall line
1994 to 2000 – SAL/Subtitle D Rules Apply

- County or City-Owned Landfill
- Groundwater Contamination – lost SAL exemption
- Subtitle D Standards apply due to size
- Built new SAL (within few years)
- Decided to close/transfer

25 inch average annual rainfall line
SAL Universe in 2009

Grandfathered PreSubtitle D Landfill

New SAL

25 inch average annual rainfall line

Grandfathered Pre-Subtitle D Landfill   New SAL
Responsibilities of Owning a Small Arid Landfill

1. Comply with federal and state requirements
2. Maintain qualified well-trained workers
3. Provide necessary equipment and supplies
4. Be a good neighbor
5. Provide reasonable service to county
6. Consider and plan for long-term landfill use and impacts
Compliance with Laws and Regulations

- Maintain SAL exemption
- Avoid enforcement actions/trips to Topeka
- Avoid fines
- Avoid public dissatisfaction

Recent major compliance problem: Proper application of landfill cover
Maintaining Qualified/Well-Trained Workers

- Attend KDHE/SWANA annual workshops
- Join SWANA – attend regional roundtables
- Read solid waste newsletters/magazines
- Talk to KDHE - our advice is free
Provide Necessary Equipment and Supplies

What equipment is needed to properly run a landfill?

- Compactor
- Loader/dozer
- Scraper
- Water tank truck
- Advice from consultants, other SAL operators

Supplies

- Sampling equipment
- Office supplies
- More advice...
Be a Good Neighbor

- Control litter
- Pick up litter
- Control dust
- Limit hours of operation
- Maintain fences and gates

- Cover waste as required; helps control
  - Scavengers
  - Odor
- Minimize tracking of mud
- Communicate with neighbors
Provide Reasonable Service to County

- Be open for service when public can practically use landfill
- Take all common wastes generated in county unless provisions made for alternate drop-off sites
- Post good signs for customers
- Provide information about facility through flyers, posters, newspaper, etc.
Plan for Long-Term Landfill Use and Impacts

- Expand landfill before you need space
- Thoroughly define landfill property boundaries and estimate capacity/life-span
- Plan for use of site after closure
- Consider effects of natural disaster on life of landfill
SAL “Water Balance” Cover Issues

SAL Final Cap Requirement

1. 18-inch low-permeability layer
2. Protective cover (frost penetration depth)

Alternative Cap Design?

- Done under new EPA RD&D rule
- Save money by eliminating low-perm layer
- Higher expenses for
  - Thicker soil layer
  - Preliminary engineering study/reports
  - Ongoing engineering monitoring/reports
Questions?

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