Our Mission - To Protect the Health and Environment of all Kansans by Promoting Responsible Choices

www.kdheks.gov
Current Permitting Issues and Concerns

Sam Sunderraj, Chief,
Solid Waste Landfills Unit
Solid Waste Permits Section
Bureau of Waste Management
Kansas Department of Health and Environment
Curtis State Office Building
1000 SW Jackson Street, Suite 320
Topeka, Kansas  66612

785-296-6563 (v)
ssunderr@kdheks.gov
What is a SAL

- It is a **SMALL** landfill, in an **ARID** location, at a site that has no evidence of groundwater contamination, in a community with no other waste management alternative.
- Regulations allow SALs to avail of an exemption.
SAL Exemption

- Exemption
- From What?
- A composite liner.
- What’s that - .........
SAL Exemption (cont)

**No** composite liner requirement.

**Simple** groundwater monitoring system to show no unacceptable levels of contamination at the site.

Would need to follow proper **operational** procedures – control storm water, screen, compact, and cover the waste.
Simple groundwater monitoring

- Simple network – upgradient well, a few downgradient wells.

- Or, simple perimeter monitoring wells.
Key OPERATIONAL items

- Do not dispose regulated quantities of hazardous waste – typically industrial waste.
- Minimize disposal of household hazardous waste (HHW).
- Minimize generation of leachate by the use of precipitation shedding covers.
Liners and Leachate Management at NEW SALs

- If a SMALL community were to obtain a permit for a new ARID landfill, the landfill would have to be designed with –
  - 2 foot thick low permeability liner
  - A leachate collection system

- This is more complex than it sounds
NEW SALs

- Simple Design
- Needs diligent management
- Is the liner soil available
- How much liner to construct
- How to keep the liner from desiccation/freeze/rain damage
- Bottom slopes have to be carefully constructed
- Leachate has to be managed.
GRANDFATHERED SALs

- SALs that applied for expanding an old operating landfill prior to October 9, 1997, and the application was approved.

- No liner or leachate collection system.

- Look at permit special conditions.
GRANDFATHERED SALs (cont)

- No liner – not even a clay liner.
- Based on history (prior to October 9, 1997)
  - of operation,
  - and suitable site geological characteristics
  - validated by groundwater monitoring.
GRANDFATHERED SALs (cont)

- No leachate collection system!

- If it is generated it has to be:
  - Evaporated in the disposal area, or
  - Pumped and treated at a wastewater treatment plant.

So minimize leachate generation.
SALs

- High priority items

- Update the permit drawing to clearly define the entire disposal area.
- Once that is clearly defined in the permit it protects the disposal capacity till it is also filled.
- This starts with the plot plan that will be further explained this afternoon.
SALs
High priority items (cont.)

- Call before you dig! – your CQA Engineer.
- Its called Construction Quality Assurance (CQA).
- Requires your Professional Engineer to oversee construction.
SALs
High priority items (cont.)

- Equipment audit –
  - Do you have the necessary equipment?
  - Do you have the correct equipment?
  - Is the equipment being used efficiently?
SALs

High priority items (cont.)

- Operate to minimize leachate generation.

- Efficient and proper covers.
  - Intermediate cover – 12” – run-off is not leachate.
  - Daily cover – 6” of soil – run-off is leachate.
  - Alternate Daily Covers – run-off is typically leachate.

- Covers in detail in the next session.