



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

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Current Permitting Issues and Concerns

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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

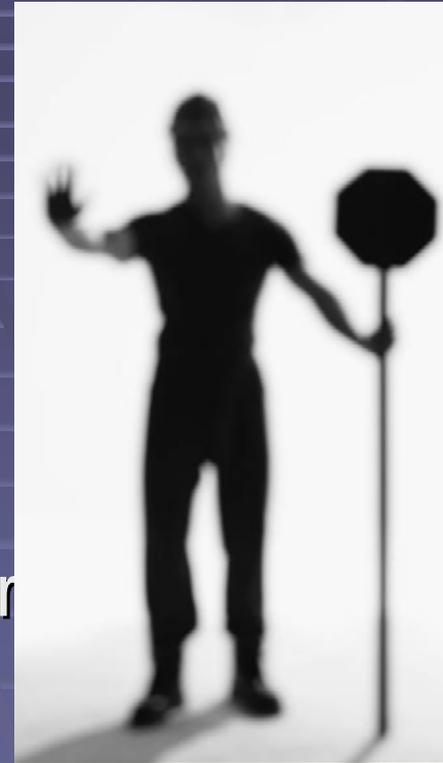
- SALs that applied for expanding an old operating landfill prior to October 9, 1997, and the application was approved.
- No liner or leachate collection system.
- Look at permit special conditions.

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.



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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?



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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.