Regulatory Perspective on Bioreactor Landfills Defining End of Post-closure

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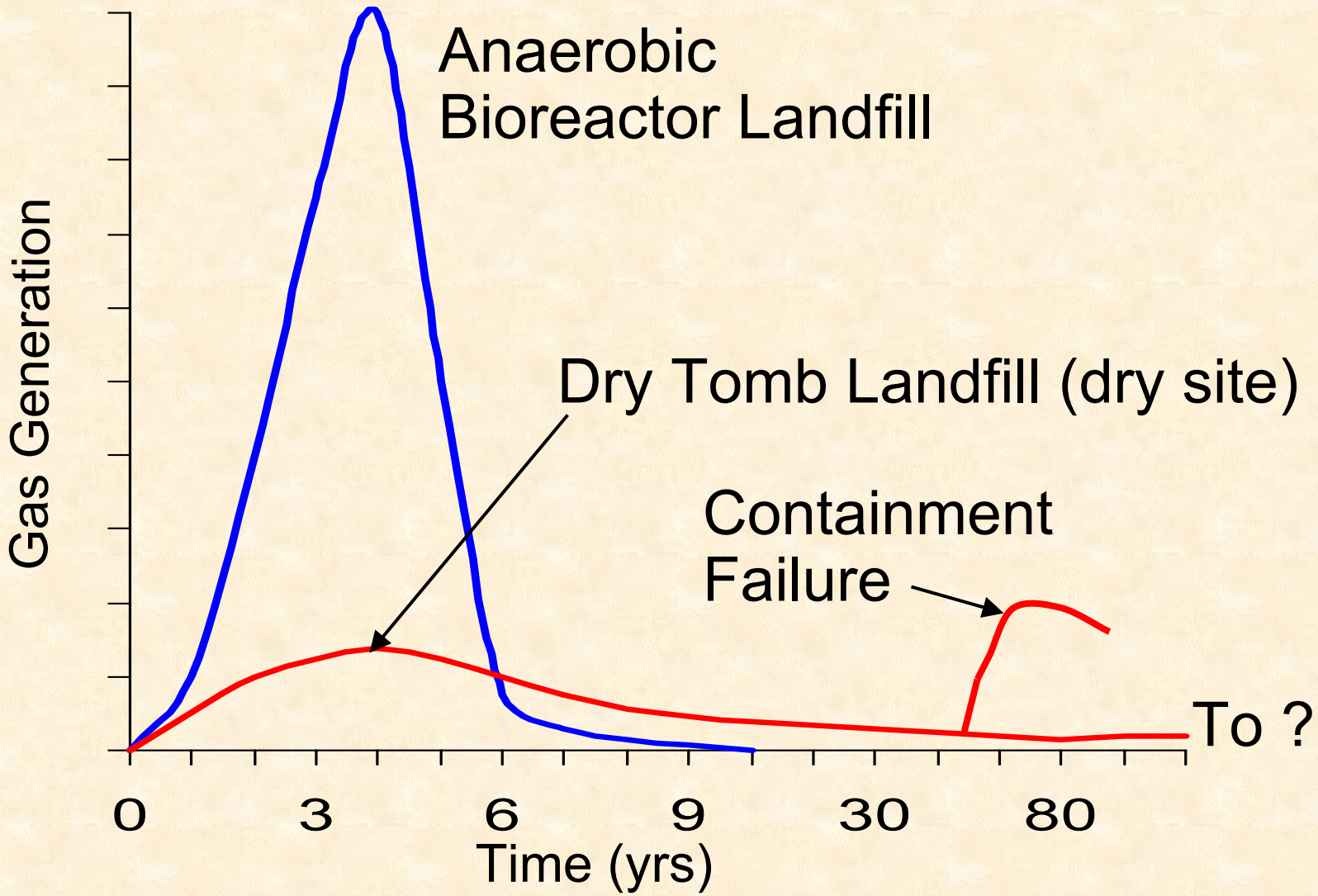
California EPA- Integrated Waste Management Board

- Postclosure Regulatory Framework
- California Experience
- Recommendations

Defining End of Post-closure Regulatory Framework- Basis of Concept



Defining End of Post-closure Regulatory Framework- RCRA Subtitle D

- 40 CRF 258.61 Post-closure care requirements:

  (a) ". . must be conducted for 30 years . ."

  (b) ". . Director of approved state may reduce or lengthen postclosure care period. ."

- 258.61(a)(1-4) Post-closure performance criteria
- 258.61(c-e) Postclosure plan requirements
- 258.28(a) Liquids Restriction

Defining End of Post-closure Regulatory Framework- California

- California Subtitle D Program- 27 CCR
- §20950-21200 Closure & Post-closure Standards
- §21769-21900 Closure & Post-closure Plans
- §22205-22254 Financial Assurances
- §20200(d) & 20340(g) Key requirements constraining Bioreactor Landfills in CA (Liquids Restriction)

Defining End of Post-closure Regulatory Framework- California

- 27 CCR §20950(a)(1) ". . Post-closure maintenance period shall extend as long as wastes pose a threat to water quality. ."
- 27 CCR §21900 ". . release from post-closure after minimum 30-years upon demonstration & approval that landfill no longer poses a threat to the public health & safety & the environment. ."
- 27 CCR §21180 Allows revision of approved Plans

Defining End of Post-closure Regulatory Framework

- Other California Aspects (local land use approvals):

  California Environmental Quality Act (CEQA)

  Conditional Use Permit (CUP)

  Local Codes and Ordinances

Defining End of Post-closure California Experience

- 165 Active solid waste landfills (<1-13K tpd)
  125 Closed/closing (closed >1/88)
  1900 Pre-regulation (closed <1/88- 90% MSW)
- One active full-scale Bioreactor Landfill (Yolo County Central)
- Recent case in CA illustrating concern with ending post-closure (Cogen Dump Site)
- Positive case of long-term post-closure (BKK)

Cogen Dump Site, Monterey Park, CA

- Closed 1959 (2 MT); odor & fire emergency abatement & enforcement 12/02; landfill gas & fire invest. in progress

BKK Landfill, West Covina

- Example of good long-range plan for closure/ postclosure.
- MSW side closed 1996.
- 40 MT; 175 acre.
- Separate adjacent RCRA closure/ corrective action LF (closed 89).

ILLUSTRATION PLAN

BKK PUBLIC GOLF COURSE & LANDFILL SITE

Regulatory Perspective
Defining End of Post-closure: Recommendations

1. Rather than "end of" look at "reducing to minimum necessary to protect environment"
2. Plan early for postclosure & future land use
3. Emphasize benefits of Bioreactor LFs as compared with Dry Tomb LFs which are also looking at this issue.
4. Research & National guidance needed to define "stabilization"; when can we turn off GCS & LCRS?

Regulatory Perspective
Defining End of Post-closure: Recommendations

5. National guidance needed for site specific risk-based approaches.

6. Pursue Deed Restriction approaches to reduce or end post-closure period

7. Regulation change recommendations & coordination:

   ASTSWMO Bioreactor LF Work Group (Comments 10/5/00; 8/7/00; 8/8/02)

   Where is our RD&D Rule???????

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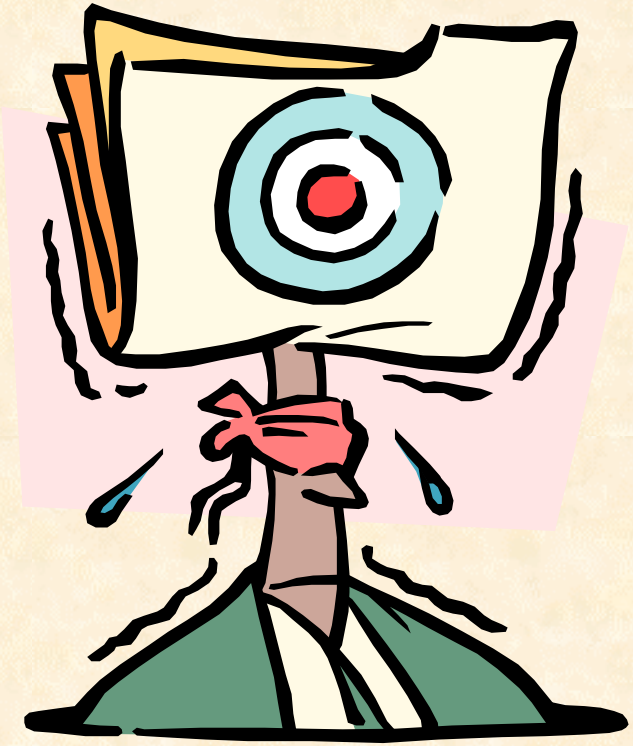
Questions?