

US EPA ARCHIVE DOCUMENT

# Regulatory Perspective on Bioreactor Landfills

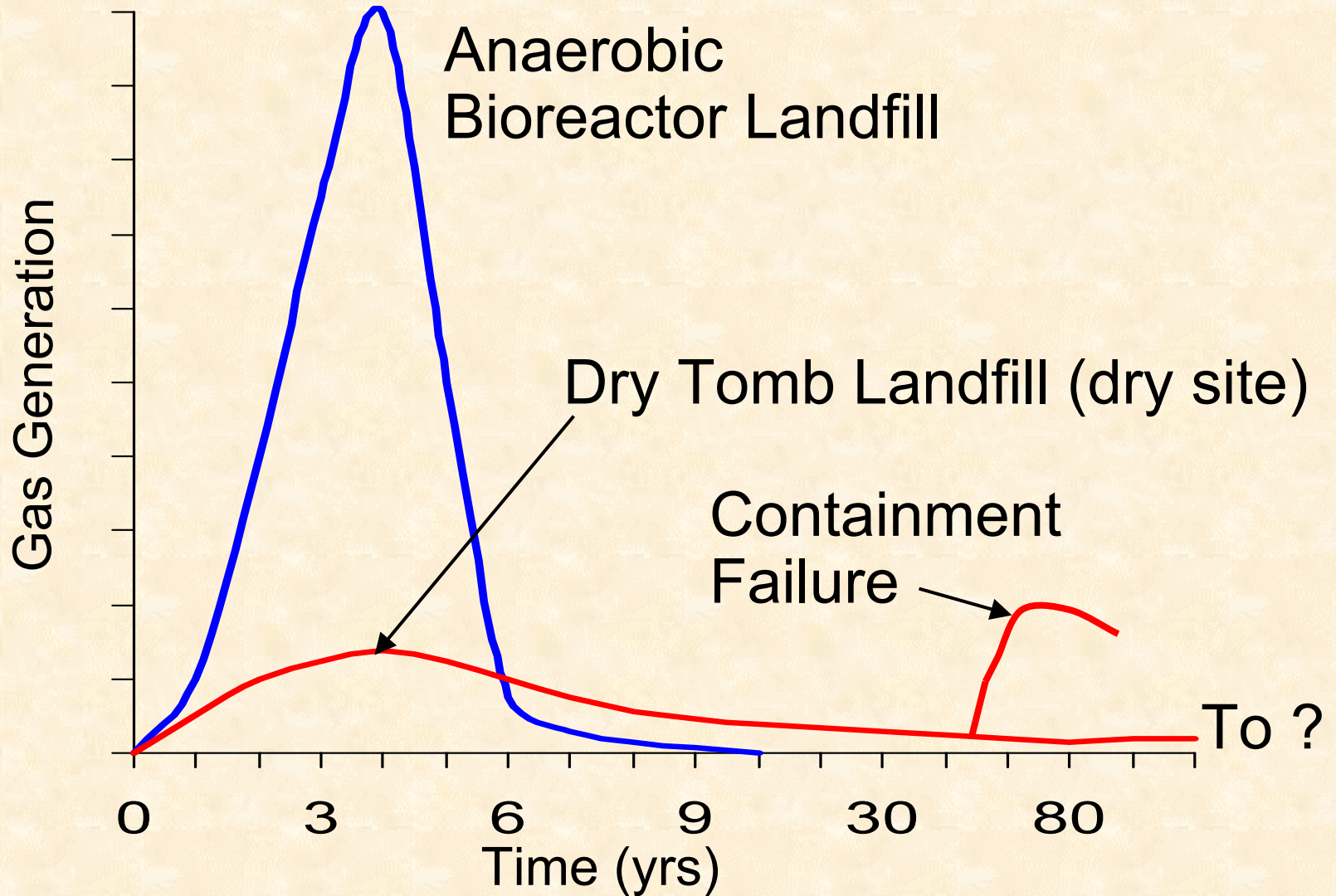
## Defining End of Post-closure

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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???????*

# Regulatory Perspective on Bioreactor Landfills

## Defining End of Post-closure

Questions?

