

# **California Composting and Alternative Daily Cover Rules for Biosolids**

**CWEA Specialty Workshop – Understanding Future  
Regulatory Trends and Impacts on Biosolids Management  
in California**

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(CalRecycle)**

# California Code of Regulations (CCR)

- **Title 14** sets state minimum standards for all other solid waste activities including collection, transfer, **composting**, contaminated soil treatment, and tire recycling facilities. It establishes a tiered permitting system for these types of facilities.
- **Title 27** of the CCR incorporates federal requirements for safe disposal of solid waste & sets state minimum standards for both active and closed landfill sites (including **alternative daily cover**), as well as landfill permitting criteria.

# **CALRECYCLE REGULATES SOME BIOSOLIDS USES**

- **COMPOST FACILITIES**
- **ADC AND FINAL COVER AT LANDFILLS**
- **LANDFILL BURIAL**
- **ANAEROBIC DIGESTION**

# **Composting Tiers**

**(Title 14 Sections 17855-17862.2)**

- Excluded
- Enforcement Agency Notification
- Full Permit

# Biosolids Composting Tiers

(quantity-dependant)

- **Excluded:** temporary storage biosolids at POTW
- **Enforcement Agency Notification:** composting biosolids on-site at POTW
- **Full Permit:** composting biosolids and green waste on or off site

# CalRecycle On-Line Assistance

## Tier placement

[www.calrecycle.ca.gov/LEA/Regs/Tiered/TierChart.htm](http://www.calrecycle.ca.gov/LEA/Regs/Tiered/TierChart.htm)

## Permit Toolbox

[www.calrecycle.ca.gov/SWFacilities/Permitting/default.htm](http://www.calrecycle.ca.gov/SWFacilities/Permitting/default.htm)

# Daily Cover at Landfills

(Title 27, Section 20680)

**Waste should be covered with a minimum of six inches of compacted earthen material to control**

vectors

fires

odors

blowing litter

scavenging

# **Alternative Daily Cover**

(Title 27, Section 20690)

**Alternative materials of alternative thickness  
for daily cover may be approved to control**

vectors

fires

odors

blowing litter

scavenging

# Approved ADC in CA

- Geosynthetic Fabric or Panel Products (Blankets)
- Foam Products
- Processed Green Material
- **Sludge and Sludge-Derived Materials**
- Ash and Cement Kiln Dust Materials
- Treated Auto Shredder Waste
- Contaminated Sediment, Dredge Spoils, Foundry Sands, Energy Resource Exploration and Production Wastes
- Compost Materials
- Processed Construction and Demolition Wastes and Materials (C&D)
- Shredded Tires
- Spray Applied Cementitious Products

# Sludge and Sludge-Derived Materials

- No public contact with materials
- Should form a compacted material with no open voids
- Restricted to a minimum of less than or equal to 12 inches
- Up to 25% of landfill cover materials or landfill cover extenders

# ADC Use in California (2008)

- Green Material 2,195,876 tons
- C&D 746,300 tons
- Auto Shredder Waste 622,055 tons
- **Biosolids 235,743 tons**

## Strategic Directive 8.3

*Review regulations to ensure that they are:*

- grounded in the best available science,
- address changing market conditions, and
- take advantage of developing technologies

# **Strategic Directive 8.3**

## **(6 Priority Areas)**

- **Alternative Daily Cover (ADC)**
- Composting - Food waste
- Emerging Technologies (anaerobic digestion)
- Three Part Test/Green Material Contamination
- Farm and Ranch Composting
- Beneficial use issues (Re: agriculture)

# ADC Evaluation

Develop a standardized guidance document on how to evaluate the ability of ADC to control odors, vectors, litter, fire, and scavenging, as well as the effect on greenhouse gas emissions.

- More scientific basis to evaluate performance of new and existing ADC materials

Develop best practices for ADC regulatory inspection methodology.

Continue monitoring the life cycle assessment of organic materials in landfills.

# Strategic Directive 6.1

- 50% reduction in the amount of organics in the waste stream by 2020.
- Over 15 million tons of organics, much of it compostable, needs to be recycled annually, as identified in the CIWMB's "Organics Roadmap"
- Will require a growing infrastructure (composting, **anaerobic digestion**, etc.) to manage organic material

Since compost facilities must comply with more stringent local air & water quality regulations, there is an increasing interest in anaerobic digestion



# Anaerobic Digestion Guidance Document

*How Anaerobic Digestion Fits Current  
Board Regulatory Structure*

[www.calrecycle.ca.gov/Publications](http://www.calrecycle.ca.gov/Publications)

# **Tier Placement For Anaerobic Digestion**

Type of Feedstock

Quantity

Location

# **Determining if Feedstock is Compostable**

If material will generate temperatures of at least 122 degrees Fahrenheit

Less than 122 degrees, the activity is not subject to Compostable Materials regulations, but is subject to Transfer Station/Processing regulations

# Anaerobic Digestion at POTWs

Most AD units at POTWs operate in the mesophilic range (<122 degrees F)

Subject to the Transfer Station requirements, but if the POTW does not accept any waste, the Transfer Station requirements do not apply

# Anaerobic Digestion at POTWs

If a POTW accepts waste, the Transfer Station or Compostable Materials requirements will apply.

The type of authorization will be dependent on the quantity and types of waste

Consult LEA for clarification

[www.calrecycle.ca.gov/LEA/Directory](http://www.calrecycle.ca.gov/LEA/Directory)

# CalRecycle AD Regulatory Structure

Send comments to:

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# CalRecycle Program EIR for Anaerobic Digestion Facilities

- \$250,000 contract with Environmental Science Associates (ESA) to develop Program EIR
- Assess environmental impacts of siting new and expanding existing anaerobic digestion facilities

# Changes to the CIWMB

- Senate Bill 63 (Strickland) eliminated the California Integrated Waste Management Board effective January 1, 2010
- **Department of Resources Recycling and Recovery (CalRecycle)** in the Natural Resources Agency
- The Division of moves from the Department of Conservation to CalRecycle

# Changes to the CIWMB

Margo Reid Brown – **Chief Deputy Director**

Mark Leary – **Deputy Director, Waste Management**

Elliot Block – **Chief Counsel**

# Changes to the CIWMB

Functions expected to remain the same

Changes primarily administrative

Appeals made to Deputy Director & Program Director

Email addresses: [firstname.lastname@calrecycle.ca.gov](mailto:firstname.lastname@calrecycle.ca.gov)

# **Public Comment Workshops**

Second Monday of month

Status of permits under consideration

Update on ongoing projects

Opportunity for public comment on activities

# Questions?

Ken Decio

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