

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

STATE WATER RESOURCES CONTROL BOARD

Staff Public Workshop

General Waste Discharge Requirements for the
Discharge of Wastes at Compost Management Units

August 27, 2012

Joe Serna Jr./CalEPA Building
Sacramento, CA

August 28, 2012

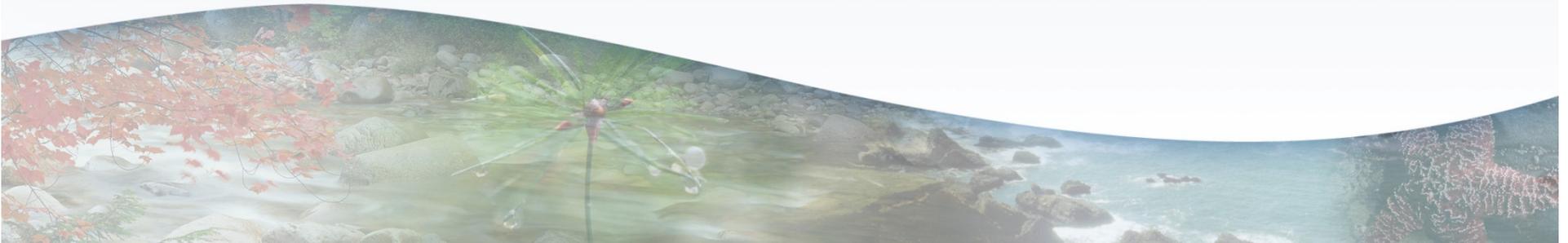
Regional Water Quality Control Board
Santa Ana Region, Riverside, CA

Roger Mitchell P.G.,
State Water Resources Control Board



Topics to Cover

- Role of the Water Boards
- Water Quality and Composting Facilities
- Goal of the General Order for Composting Management Units
- Wastes: Eligible, Exempt
- Design Specification Tiers
- Enrollment and Fees
- Monitoring and Reporting Requirements
- Next Steps & Schedule



WATER BOARD WATER QUALITY RESPONSIBILITY

Protect Water Quality from Discharges of Waste to Surface Waters and Groundwater

- Permitting
 - Discharges that could affect surface water
 - Implement Federal National Pollutant Discharge Elimination System (NPDES) required by federal **Clean Water Act** and issue NPDES permit(s) from wastewater or stormwater
 - Note: Practice of agriculture exempt from NPDES permit, not composting
 - Discharges that could affect groundwater
 - Issue or waive waste discharge requirements (WDRs)
- Enforcement
 - Various actions



PERMITTING: NPDES

Q: When is an NPDES permit NOT required?

A: ONLY if NO discharge to waters of the U.S. under any circumstances

- Possible ways to not discharge to waters of the U.S. (i.e., no NPDES permit needed)
 - All potential sources of discharge are protected from precipitation (cover, etc.)
 - Site graded with potential sources of discharge fully bermed

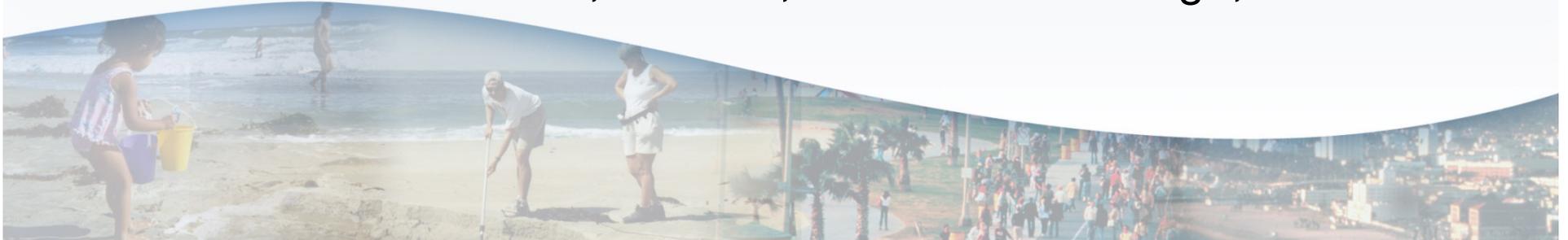


PERMITTING: WASTE DISCHARGE REQUIREMENTS (WDRs)

Porter-Cologne Water Quality Control Act

California Water Code (CWC) Division 7, section 13000 et. seq.

- Discharges of waste that could affect waters of the state
 - All surface water and groundwater are waters of the state
- Definition of waste is very broad – could be anything that could affect water quality
- Report of Waste Discharge (ROWD)
 - Required of anyone who discharges waste that could affect quality of waters of the state
 - Includes character, location, volume of discharge, etc.



CONSTITUENTS OF CONCERN IN LEACHATE AND RUNOFF

- Some of the constituents of concern (COCs) at composting facilities are:
 - Salt (Total Dissolved Solids, Electrical Conductivity)
 - Nutrients (Nitrates)
 - Pathogens (E. coli.)
 - Metals (Iron, Copper, Manganese, Nickel, Zinc, Aluminum, Arsenic)



GROUNDWATER QUALITY: NITRATE AS INDICATOR OF HUMAN IMPACTS

(<http://geotrackerbeta.ecointeractive.com/>)

GEOTRACKER GAMA

LOCAL INFORMATION

CITY
UNINCORPORATED

COUNTY
YOLO - [VIEW WATER REPORTS](#)

GROUNDWATER BASIN
SACRAMENTO VALLEY - YOLO (5-21.67)

[ZOOM IN TO SEE BORING LOGS](#)

LEGEND

- SQUARE ICONS REPRESENT ONE OR MORE CDPH WELLS
- CIRCLE ICONS REPRESENT OTHER WATER SUPPLIES
- ▲ TRIANGLE ICONS REPRESENT ENVIRONMENTAL MONITORING WELLS
- ICONS WITH A CIRCLE AROUND THEM SIGNIFY A CLUSTER OF WELLS
- ⊖ ICONS WITH A DOTTED LINE AROUND THEM SIGNIFY AN APPROX LOCATION

Map Satellite Hybrid Terrain

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SHOW ADVANCED QUERY OPTIONS WATER DEPTH QUERY MAP SIZE: 32574 MATCHING WELLS (12.37% ABOVE DRINKING WATER STANDARD)

640x480

DATASETS - [ADDITIONAL INFORMATION](#)

■ Water Supply Wells (CDPH) ● Water Supply Wells (Other) ▲ Environmental Monitoring (Wells)

SHOW ME OF IN THE PAST

GROUNDWATER QUALITY: SALINITY AS INDICATOR OF HUMAN IMPACTS

(<http://geotrackerbeta.ecointeractive.com/>)

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SHOW ADVANCED QUERY OPTIONS WATER DEPTH QUERY MAP SIZE: 20591 MATCHING WELLS (19.55% ABOVE DRINKING WATER STANDARD)

640x480

DATASETS - ADDITIONAL INFORMATION

■ Water Supply Wells (CDPH) ● Water Supply Wells (Other) ▲ Environmental Monitoring (Wells)

SHOW ME OF IN THE PAST

GOALS OF THE COMPOST GENERAL ORDER

- Protect water quality to the same extent as waste discharge of similar threat to water quality
- Provide streamlined permitting process if facilities meet certain requirements
- Develop WDRs with conditions for eligible waste types at composting facilities having the potential to threaten the quality and beneficial uses of the waters of the state
- Apply to a broad array of composting facilities
- Harmonize, as feasible, with both:
 - CalRecycle's composting regulations in Title 14, and
 - CalRecycle's waste diversion efforts



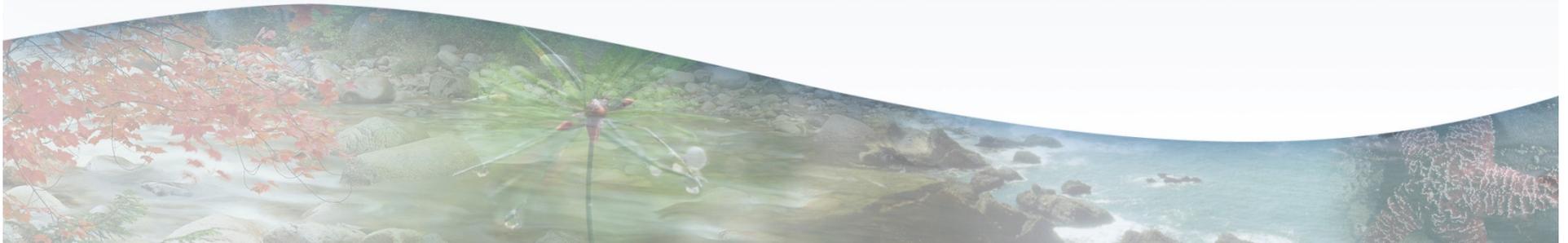
GOALS OF THE COMPOST GENERAL ORDER

- Recognize the factors affecting water quality:
 - Waste types
- Identify Water Quality Protection Measures (WQPMs) to reduce potential threat to water quality
- Provide for tiered WQPMs based on waste type
- Assess annual fees commensurate with regulatory effort



COMPOST GENERAL ORDER: ELIGIBLE FEEDSTOCKS

- Agricultural Materials
- Anaerobic Digestate
- Biosolids (Class EQ, A, and/or B)
- Food Materials
- Green Materials
- Manure
- Paper Materials
- Vegetative Food Materials
- Other Non-Prohibited Feedstocks



COMPOST GENERAL ORDER: CONDITIONALLY EXEMPT COMPOSTING ACTIVITIES

- Agricultural Composting
- Chipping and Grinding Facilities and Operations
- Chipping and Grinding Areas at CMUs
- Composting Conducted at Facilities Regulated by the Water Boards
- Lot Clearing (Fire Protection)
- Non-Commercial Composting
- Stabilized Compost Areas at CMUs
- With-in Vessel/Fully Enclosed Composting



COMPOST GENERAL ORDER: ADDITIVES AND AMENDMENTS

- Additive use is limited to no more than 30% - on a dry weight basis of the total feedstocks for any given batch of compost.
 - Fertilizing material
 - Liquid food material
 - Manures
 - Water
 - Other approved materials
- Amendments – the use of any amendment is allowed provided these are handled, stored, and processed in a manner approved in an NOI, and do not pose a threat to water quality.



COMPOST GENERAL ORDER: DESIGN SPECIFICATION TIERS

Tier 1

< or = 12, 500 cubic yards

Agricultural Materials

Green Materials

Paper Materials

Vegetative Food Materials

Tier 2

Tier 3

> 12, 500 cubic yards

Agricultural Materials

Green Materials

Paper Materials

Vegetative Food Materials

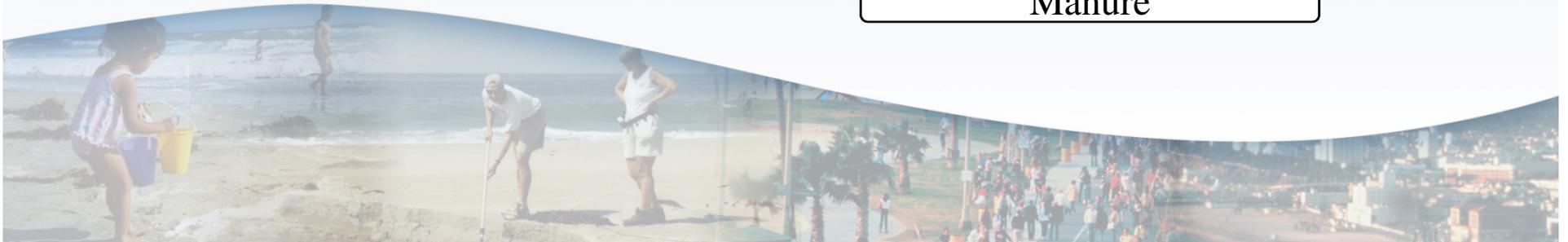
OR, any volume of:

Anaerobic Digestate

Biosolids (EQ, A, B)

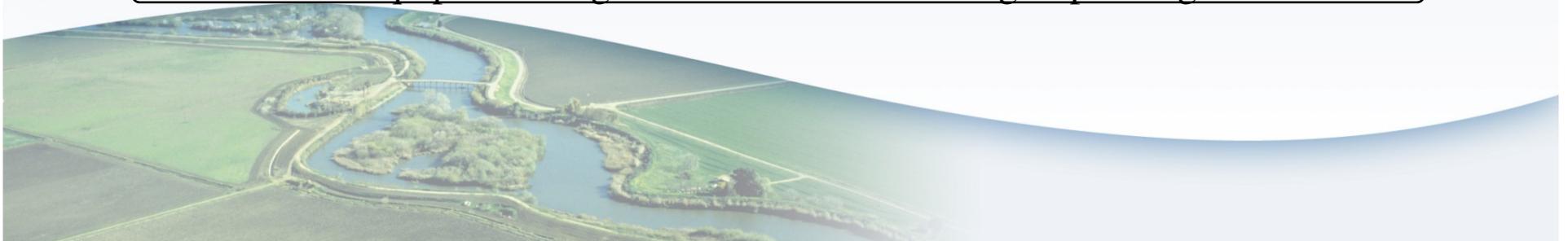
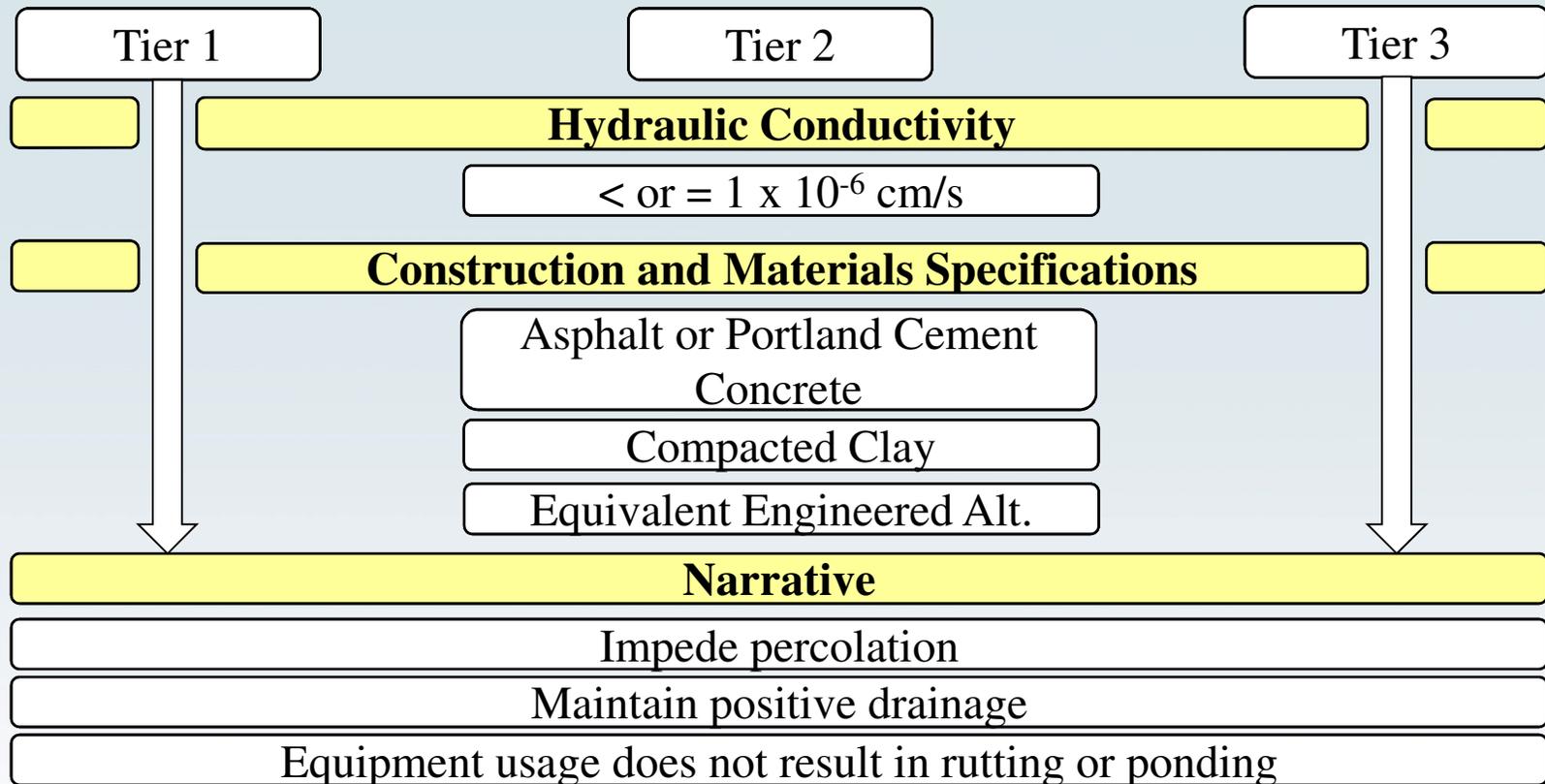
Food Materials

Manure



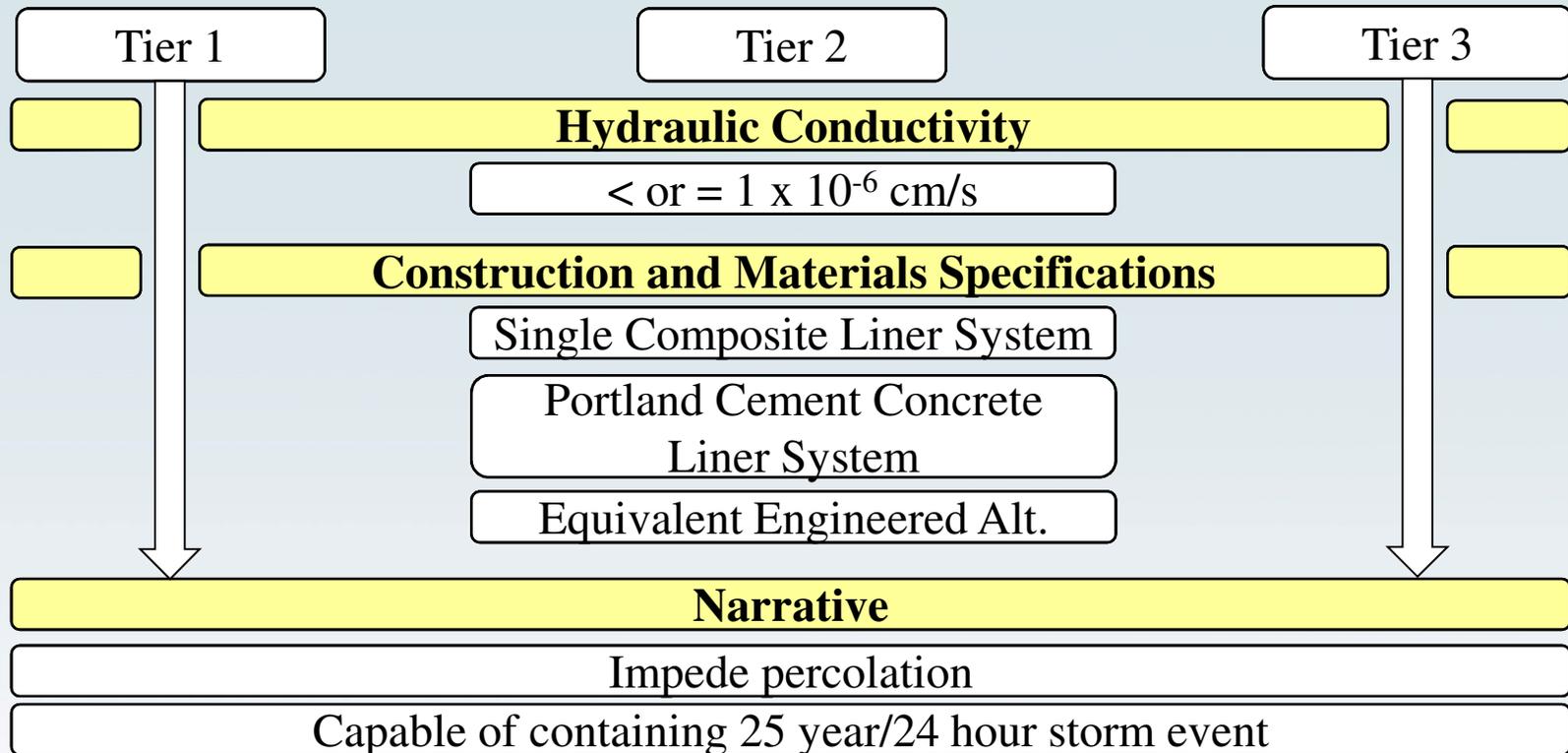
COMPOST GENERAL ORDER: DESIGN SPECIFICATION TIERS

Pads



COMPOST GENERAL ORDER: DESIGN SPECIFICATION TIERS

Ponds



COMPOST GENERAL ORDER: REGULATORY TIERS:

Berms

Tier 1

Tier 2

Tier 3

Narrative

Adequately protected from erosion

Prevent run-on/runoff from a 25 year/24 hour storm event

Drainage Conveyance Systems

Tier 1

Tier 2

Tier 3

Narrative

Impede percolation

Capture and transmit w/o overflow from a 25 year/24 hour storm event



COMPOST GENERAL ORDER: ENROLLMENT PROCESS

- What is required to be submitted to the Regional Water Board's Executive Officer to apply for enrollment under the general compost order?
 - A complete Notice of Intent (Attachment B)
 - A technical report (Attachment C), and
 - A filing fee (first year's annual fee)



COMPOST GENERAL ORDER: ENROLLMENT PROCESS

- When are Compost Management Units required to seek enrollment?
 - New CMUs: 6-months prior to the anticipated receipt of materials for composting.
 - Existing permitted CMUs: At any time the Discharger may seek rescission of individual WDRs, and seek enrollment under this general order.



COMPOST GENERAL ORDER: ANNUAL FEES

- Any person discharging or proposing to discharge waste is required to submit a ROWD/NOI and an annual fee.
- Dischargers applying for coverage under the compost general order will submit a filing fee, which serves as the first year's annual fee.
- Dischargers enrolled under the compost general order will be assigned a threat to water quality and complexity rating of 3-C, plus any applicable surcharges.
- Pursuant to CCR Title 23, section 2200 (as of 7/27/2012) the annual fee for a threat to water quality and complexity rating of 3-C is equal to \$1,520.96



COMPOST GENERAL ORDER: WASTEWATER DETENTION POND INSPECTIONS AND MONITORING

- Applicability: Any Discharger enrolled under the Order, and having a wastewater detention pond.
- Quarterly Inspections
 - Evaluate the condition of the liner system;
 - Estimate the available capacity, and current volume of wastewaters (gallons) or solids (cubic yards); and
 - Evaluate general condition of ancillary containment structures
- Semi-annual sampling and analysis of each wastewater pond



COMPOST GENERAL ORDER: TIER 3 – SPECIFIC MONITORING

- Leachate Monitoring (if observed)
 - Collect and analyze samples
- Groundwater Monitoring
 - If the highest anticipated depth to groundwater is equal to, or less than 150 feet below ground surface



COMPOST GENERAL ORDER: REPORTING REQUIREMENTS

- General Reporting Requirements – Regional Board may request
- Updated Notice of Intent at least 140 days prior to any significant changes at the CMU
- Design Report and Construction Quality Assurance Plan
- Construction Quality Assurance Report within 30 days after completion of construction
- Wastewater Detention Pond Monitoring and Maintenance Report
- Tier 3 – Specific Monitoring Report Requirements



NEXT STEPS

- Formal Comment Period: August 7, 2012 to September 12, 2012
- Mitigated Negative Declaration Release: September 14, 2012
- State Water Resources Control Board Meeting October 16, 2012
Hearing for Adoptions



Comments:

Jeanine Townsend, Clerk to the Board

State Water Resources Control Board

1001 I Street, 24th Floor

Sacramento, CA 95814, or

commentletters@waterboards.ca.gov

Please indicated the subject line: “Comment Letter – Compost Order”

**Written Comments and Materials MUST be received by 12:00 noon
on September 12, 2012**

Questions:

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Regional Water Quality Control Board, San Diego

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(858)467-2724

