



Proposed Amended Rule 1133 Series – Composting, Chipping and Grinding, and Related Operations

Rule 1133 – Composting and Related Operations - General Administrative Requirements

Rule 1133.1 – Chipping and Grinding Activities

Rule 1133.2 – Emission Reductions from Co-Composting Operations

Rule 1133.3 – Emission Reductions from Greenwaste Composting Operations

WORKING GROUP MEETING #3

THURSDAY JUNE 5, 2025 – 2:00 PM

Zoom Meeting: <https://scaqmd.zoom.us/j/96768220758>

Meeting ID: 967 6822 0758

Agenda

Recap of Working Group Meeting #2

Initial Draft Rule Language & Key Definitions

PAR 1133 – Materials for Direct Land Application

PAR 1133.1 – Chipping & Grinding Operations

PAR 1133.2 – Co-composting Operations

PAR 1133.3 – Composting Operations

Next Steps

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- **PM2.5 (Fine Particulates)**
 - Basin in serious nonattainment for PM2.5 standard
 - Under sanction clock to implement “most stringent measures”
- **Best Control Measure-10 (BCM-10) – Greenwaste**
 - Identified as a “most stringent measure” in PM2.5 Plan
 - Reduces ammonia and VOC emissions, precursors to PM2.5, from direct land application (DLA) of uncomposted greenwaste
 - Restricts supply of uncomposted greenwaste for DLA unless incorporated into soil or covered with finished compost
 - Enhanced recordkeeping by suppliers required
- **Best Control Measure-11 (BCM-11) – Foodwaste**
 - Considered pre-digestion of foodwaste prior to composting
 - Will not be implemented in this rulemaking project.



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Initial Draft Rule Language

- **Emission reduction measures**
 - Restrictions on supply for direct land application
 - Legacy co-composters to use Best Management Practices
 - Lowered de minimus exemption thresholds
- **Administrative changes**
 - Eliminated Registration process and associated fee
 - Renamed Annual Updates to Reporting and moved requirement from Rule 1133 to operation-specific rules
- **Rule language changes**
 - Consistency and clarity across Definitions
 - Moved requirements present in Definitions and Exemptions subdivisions to Requirement subdivisions
 - Improved readability with updated rule titles, purposes, and applicability, and some language reorganization



Key Definitions – Direct Land Application



Uncomposted Greenwaste

- Has not completed pathogen reduction process

Intermediate Material

- Pathogen-reduced land cover or similar products

Finished Compost

- Completed both active phase and curing phase of composting

Key Definitions – Processes

Active Phase, Curing Phase

- Moved timeframes and standards to Requirement subdivisions

Existing Small-capacity Co-composting Operation

- Newly defined term to describe legacy co-composters, previously described in Rule 1133.2 Exemptions

Public-owned Small-capacity Co-composting Operation

- Newly defined term, previously described as “municipal” in Rule 1133.2 Exemptions



Key Definitions – Materials



Greenwaste

- Revised to include food scrap co-collected with curbside greenwaste and exclude woody waste if free of leaves

Woodwaste

- Revised to include woody parts of greenwaste if free of leaves

Foodwaste

- Revised to clarify food scraps in curbside greenwaste

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Background on PAR 1133

- Originally, Rule 1133 implemented the Registration and Annual Update requirements for facilities in rule series
 - Received feedback that rule structure was confusing with limited compliance
 - Registration is eliminated and Annual Update is now called Reporting and located in each operation-specific rule
- PAR 1133 repurposes rule to implement restrictions on direct land application
 - Restrictions on direct land application of uncomposted greenwaste described in BCM-10, a “most stringent measure”
 - Under sanction clock to implement BCM-10 to reduce PM2.5 and precursors



Emission Reduction Strategies





From Working Group Meeting #2

Proposed Framework

Strategy	Strategy #1 Active composting required before supplying	Strategy #2 May only be supplied for DLA if covered with finished compost cap	Strategy #3 May only be supplied for DLA if tilled into soil	Strategy #4 Prohibit materials above TKN threshold
Advantages	2008 study indicated lower VOC and ammonia emissions	2010 study identified this best management practice to reduce VOC and ammonia	2015 study indicated emission profile similar to control soil	Quantifiable approach based on potential to emit ammonia
Disadvantages	Additional composting capacity needed or additional cost and emissions for transportation	Cost and emissions associated with transport of finished compost or compost covers	Cost and emissions associated with operating tilling equipment	Need to establish acceptable threshold and cost associated with analysis

- Direct land application of uncomposted greenwaste emits more ammonia than composted greenwaste
 - As explained in Working Group Meeting #2, certain bacteria and archaea convert ammonia into plant-usable nitrogen in finished compost, a nutrient-rich soil amendment
- Emissions from direct land application of uncomposted greenwaste can be reduced by:
 1. Completing at least pathogen-reduction/active phase first
 2. Covering with finished compost
 3. Incorporating/tilling into soil

Summary of PAR 1133 (d) Requirements

Applies To	Includes	Excludes	Restriction	No Restriction
 <p>Rule 1133.1</p>  <p>Rule 1133.2</p>  <p>Rule 1133.3</p>	 <p>Uncomposted Greenwaste</p>	<ul style="list-style-type: none"> • Finished compost • Compost overs (includes compost mulch) • Intermediate Material (pathogen-reduced mulch) • Woodwaste (woodchips) 	<p>Supply for Agricultural Operations to:</p> <ul style="list-style-type: none"> • Incorporate into soil 6 inches • Cover with 6 inches of finished compost or compost overs 	<p>Supplied to:</p> <ul style="list-style-type: none"> • Co-composting • Composting • Digestion • Biomass Power Generation • Outside South Coast AQMD

Additional Elements of PAR 1133

- Subdivision **(e) Recordkeeping**
 - Demonstrate compliance with uncomposted greenwaste restrictions
 - Maintain onsite for 2 years
- Subdivision **(f) Prohibitions**
 - May not supply foodwaste, biosolids, digestate, or manure to direct land application
- Subdivision **(g) Exemptions**
 - Less than 100 tons of uncomposted greenwaste supplied per year



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Background on Rule 1133.1

- Purpose is to prevent inadvertent decomposition at chipping and grinding operations on material not for composting
- Received feedback that certain exceptions and pathways were inconsistent with statewide regulations
- Goal to reorganize recordkeeping
 - Included with rule requirements
- Reporting requirements to be improved
 - Previously located in separate rule (Rule 1133)



Summary of Changes for PAR 1133.1



- Subdivision **(d) Requirements** largely unchanged
- Existing recordkeeping requirements now located in subdivision **(e) Recordkeeping**
- Annual reporting, formerly known as Annual Update in Rule 1133, now in subdivision **(f) Reporting**
- **(g) Exemptions**, formerly subdivision (f), updated:
 - Exemption lowered from 1,000 cubic yards (237 tons by conversion factor) to 100 tons per year
 - Removed palm exemption
 - Removed low moisture content exemption
- Moisture content measurement, located in former subdivision (e) and no longer needed, deleted

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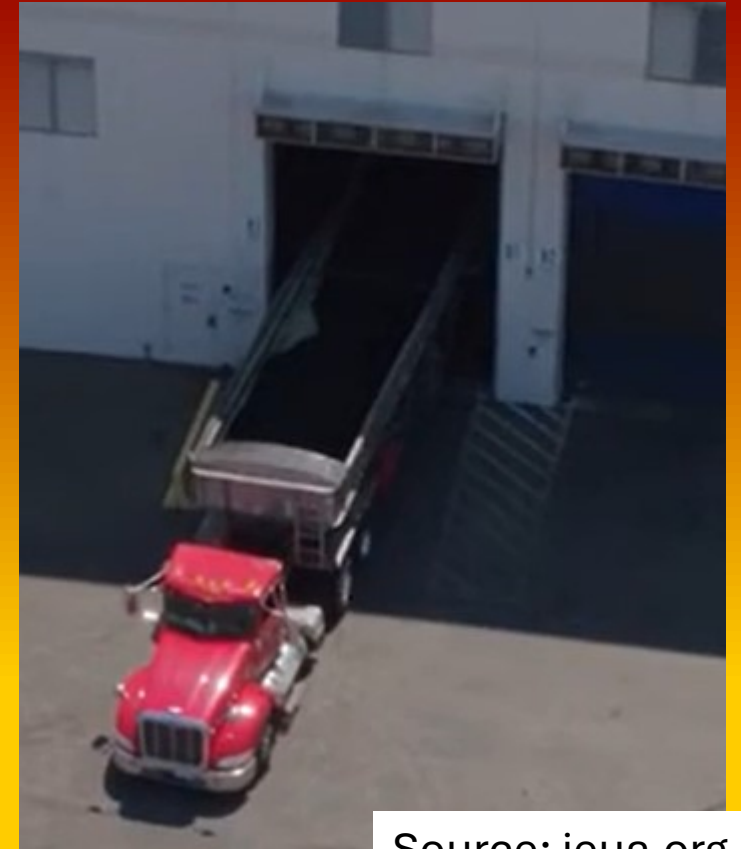
Background on Rule 1133.2



- Addresses co-composting operations, or composting of biosolids or more than 20% manure
- Some requirements of co-composting located in subdivision (c) Definitions or subdivision (j) Exemptions
- Addresses one facility not required, by exemption, to install controls or use best management practices to reduce emissions
- As noted in Working Group Meeting #1, composting emission factors currently under review by the California Air Pollution Control Officers Association
 - Updated emission-related information may be forthcoming
- Annual reporting (called Annual Update) was required in a separate rule: Rule 1133

Summary of Changes for PAR 1133.2

- Subdivision **(d) Requirements** now includes:
 - Requirements for active phase, formerly in Definitions
 - 22 days or Solvita Maturity Index 5
 - Requirements for curing phase, formerly in Definitions
 - 40 days, Solvita Maturity Index 7, or direct respirometry
- New subdivision **(e) Existing Small-capacity Co-composting Operation Alternative**
 - Requires windrow composting best management practice, from Rule 1133.3 adopted in 2011
- New subdivision **(f) Publicly-owned Small-capacity Co-composting Operation Alternative**
 - Existing requirements moved from Exemptions to dedicated subdivision



Source: ieua.org

Additional Elements of PAR 1133.2



- Subdivision **(g) Test Methods and Protocol** updated with clear procedures for source test protocols, testing, and reports
- Annual reporting, formerly located in Rule 1133, now in subdivision **(i) Reporting**

PAR 1133.2 – Subdivision (j) Exemptions

- Exemption lowered from 1,000 tons to 100 tons of throughput per year
 - Formerly-exempt facility could emit more than 8 lbs ammonia per day, using default emission factors
- Exemption for existing small-capacity co-composting operations deleted
 - Required to use best management practices in subdivision (e)
- Requirements for publicly-owned small-capacity co-composting operations moved to dedicated subdivision (f)



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Background on Rule 1133.3



- Addresses composting operations not subject to Rule 1133.2 (co-composting)
 - Rule 1133.3 applies to “greenwaste composting”
 - Rule 1133.3 also includes composting of less than 20% manure and foodwaste composting
- As with other rules in series, annual reporting requirements located in Rule 1133
- No de minimus exemption threshold present in existing rule language
- Also did not exempt composting at schools, performed for education, or agricultural operations, exempt in other rules in series

Summary of Changes for PAR 1133.3

- Subdivision **(d) Requirements** now includes:
 - Similar to PAR 1133.2, requirements for active phase and curing phase of composting, formerly located in Definitions
- Subdivision **(e) Test Methods and Protocol** updated with clear procedures for source test protocols, testing, and reports
- Subdivision **(f) Recordkeeping** updated with clear language of existing records
- Annual reporting, formerly located in Rule 1133, now in subdivision **(g) Reporting**



PAR 1133.3 – Subdivision (h) Exemptions



- Added educational exemption for school composting
- Added agricultural operation exemption
- Added exemption set at 100 tons of throughput per calendar year
 - Consistent with exemption thresholds in PARs 1133, 1133.1, and 1133.2
 - Facility performing 100 tons of composting, expected to emit less than 0.2 lbs of ammonia and about 1 lbs of VOC per day using default emission factors

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Next Steps

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Milestone	Projected Date
Release of Preliminary Draft Rule Language & Staff Report	June 2025
Public Workshop	June/July 2025
Set Hearing	August 2025
Public Hearing	September 2025



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