

Guidance: Land Application of Compostable Materials and/or Digestate

This guidance provides local enforcement agencies (EA) and other interested parties with information regarding the land application of compostable material and/or digestate.

Land Application [[14 CCR section 17852\(a\)\(24.5\)\(A\)](#)]

“Land application” is the final deposition of compostable material and/or digestate spread on any land, including land zoned only for agricultural uses, and is not considered to be disposal provided it meets certain conditions.

“Compostable Material” means any organic material that when accumulated will become active compost as defined in [Title 14 California Code of Regulations \(14 CCR\) section 17852\(a\)\(1\)](#).

“Digestate” means the solid and/or liquid residual material remaining after organic material has been processed in an in-vessel digester, as defined in [14 CCR section 17896.2\(a\)\(14\)](#). Digestate intended to be composted pursuant to this Chapter may only be handled at a facility that has obtained a Compostable Materials Handling Facility Permit pursuant to [14 CCR section 17854](#).

Compostable material and/or digestate must meet the following conditions at the time of land application:

1. Maximum Metal Concentrations-[14 CCR section 17868.2](#)

The compostable material and/or digestate must meet the following maximum metal concentration requirements:

Maximum Acceptable Metal Concentrations

Constituent	Concentration on dry weight basis (mg/kg)
Arsenic (As)	41

Constituent	Concentration on dry weight basis (mg/kg)
Cadmium (Cd)	39
Chromium (Cr)	See note below*
Copper (Cu)	1,500
Lead (Pb)	300
Mercury (Hg)	17
Nickel (Ni)	420
Selenium (Se)	100
Zinc (Zn)	2,800

*Note: Although there is no maximum acceptable metal concentration for chromium, operators shall arrange for concentrations of chromium to be determined in connection with the analysis of other metals.

2. Pathogen Density Limits- [14 CCR section 17868.3\(b\)\(1\)](#)

The compostable material and/or digestate must meet the following pathogen density limit requirements:

Pathogen Density Limits

Pathogen	Density Limit-Most Probable Number per gram(s) of total solids on a dry weight basis (MPN/GTS)
Fecal coliform	< 1,000 MPN/GTS
Salmonella sp.	< 3 MPN/4GTS

3. Land Application Frequency Limits-[14 CCR section 17852\(a\)\(24.5\)\(A\) 4](#)

The land application frequency limits and accumulated depth for compostable material and/or digestate are provided below:

Land Application Frequency and Depth

Zoning	Frequency	Depth	Alternatives With EA Approval in Consultation With RWQCB	Alternatives With EA Approval in Consultation With CDFA*
Land Not zoned only for agricultural uses	< 1 per 12-month period	< 12 inches accumulated on surface	X	
Land zoned only for agricultural uses	< 3 per 12-month period	< 12 inches accumulated on surface	X	X

*CalRecycle shall coordinate all EA requests for consultation with the California Department of Food and Agriculture

4. Physical Contamination Limits-[14 CCR section 17868.3.1](#)

On and after January 1, 2018, the compostable material and/or digestate must not contain more than 0.5% by dry weight of physical contaminants greater than 4 millimeters (no more than 0.1% shall be film plastic greater than 4 millimeters) as specified in 14 CCR section 17868.3.1.

Alterative Frequency and/or Depth

For land not zoned for agricultural uses, the EA, in consultation with the Regional Water Quality Control Board (RWQCB), may approve alternative application frequencies and depths, if the EA, after such consultation, determines the alternatives will not adversely affect public health and safety and the environment.

For land zoned only for agricultural uses, the EA, in consultation with the California Department of Food and Agriculture and RWQCB, may approve alternative frequencies and depths, if the EA, after such consultation, determines that the alternative will not adversely affect public health and safety and the environment. The California Department of Food and Agriculture shall determine if the alternative frequencies and depths are agronomically beneficial. CalRecycle shall coordinate all EA requests for consultation with the California Department of Food and Agriculture.

Verification of Compliance

The EA may request verification that the land application of compostable materials and/or digestate is in compliance with the conditions provided above as specified in [14 CCR section 17852\(a\)\(24.5\)\(A\)5](#). It is the responsibility of the property owner to provide verification of compliance to the EA. The landowner may submit information provided by a supplier or other party. Compostable material and/or digestate that is spread onto land and is not in compliance with the land application requirements may be considered illegal disposal of solid waste in violation of [Public Resources Code section 44002](#).

The EA may investigate complaints of alleged violations such as inappropriate use or final disposal of compostable material and/or digestate spread on land pursuant to [14 CCR section 18302](#).

Other Requirements

Nothing in these standards shall be construed as relieving any owner, operator, or designee from the obligation of obtaining all authorizations and complying with all requirements of other regulatory agencies, including but not limited to, local health entities, RWQCBs, air quality management districts or air pollution controls districts, local land use authorities, and fire authorities [[14 CCR section 17850\(d\)](#)].

Land Application Requirement Applicability

Land application requirements do not apply for the following:

1. The use of compost produced in compliance with [Chapter 3.1 and/or 3.2](#) of this Division,
2. The use of compostable material and/or digestate for gardening or landscaping on a parcel of land five acres or less in size,
3. The final deposition of compostable material and/or digestate spread on land by a Federal, State, or a local government entity, provided the material is applied in accordance with applicable law,
4. The final deposition of agricultural by-product materials spread on land as authorized by the State Water Resources Control Board (SWRCB) or a RWQCB pursuant to Waste Discharge Requirements, a Waiver of Waste Discharge Requirements, a Resolution, or other issued requirements from the SWRCB or a RWQCB having jurisdiction, provided this final deposition does not adversely affect public health and safety or the environment.
5. The beneficial reuse at a solid waste landfill pursuant to [Title 27, California Code of Regulations, section 20686](#), or
6. The beneficial reuse of biosolids pursuant to Part 503, Title 40 of the Code of Federal Regulations and SWRCB General Order No. 2004-0012-DWQ, or site-specific Waste Discharge Requirements or other issued requirements from the SWRCB or a RWQCB having jurisdiction.

Other Resources

- [Questions and Answers: Compostable Material Regulations](#)

Resources

- [LEA Central](#)
- [Proposed Regulations](#)
- [Rulemaking Archives](#)
- [Current Regulations](#)
- [Regulations Implementation](#)
- [Legislation and Regulations](#)

- [Legislation Implementation](#)
- [Solid Waste Facilities Home](#)