

Answers to questions about...

Biosolids

The Orange County Sanitation District (OC San) is a public agency that provides wastewater collection, treatment, and recycling services for approximately 2.6 million people in central and northwest Orange County. OC San has two plants that treat wastewater from residential, commercial, and industrial sources.

What are Biosolids?

Biosolids are nutrient-rich, treated organic matter recovered through the treatment of wastewater.

How are they treated?

Solids in wastewater (sewage sludge) are settled through the treatment process and treated in digesters to minimize pathogens and odors. These digested solids are called biosolids.

The digestion process also yields methane gas that is converted to electricity to fuel most of our treatment operations. The waste heat from the bio-generators is recycled to heat the digesters.

How are biosolids beneficially reused?

- Nearly half of our biosolids are recycled and used as soil amendment for land application on farm fields to create and maintain nutrient-rich soils and improve crop yields.
- The remaining biosolids are further processed through composting to create a consumer-grade soil amendment that is distributed to agricultural, commercial, and residential users.

What is land application?

Land application uses biosolids as a soil amendment to fertilize farm fields to grow crops, such as feed, seed, and fiber. The biosolids are applied using a manure spreader, then tilled into soil using a tractor and disc. Because biosolids are nutrient-rich, contain beneficial microbes, and bring needed organic matter to marginal desert soils, they are a low-cost, natural, and sustainable alternative to common synthetic fertilizers.

Where are OC San's biosolids recycled?

The locations are listed on the map at the bottom of page 2.

What is the Biosolids Program?

OC San's biosolids program consists of processes to ensure solids are treated onsite and reused offsite in accordance with all regulations and best management practices.

To ensure the sustainability of the biosolids program, OC San maintains diverse management options and periodically inspects contractor facilities to verify that they are following best management practices and to achieve program reliability.

Finished Compost



Alfalfa



Screened Compost



Statewide Policies Support Biosolids Recycling

In 2016, California law SB 1383 established methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants. The bill aimed to address the many impacts of climate change on human health, especially in California's most at-risk communities, and on the environment. The new law established targets for reducing the disposal of organic waste by requiring 50 percent reduction by 2020 and 75 percent reduction by 2025. As a result, local jurisdictions are encouraged to use and purchase biosolids-based amendments and products.

Orange County's biosolids are organic, highly-regulated, and meet strict federal, state and local standards for recycling this resource. OC San's pretreatment program has reduced the average daily

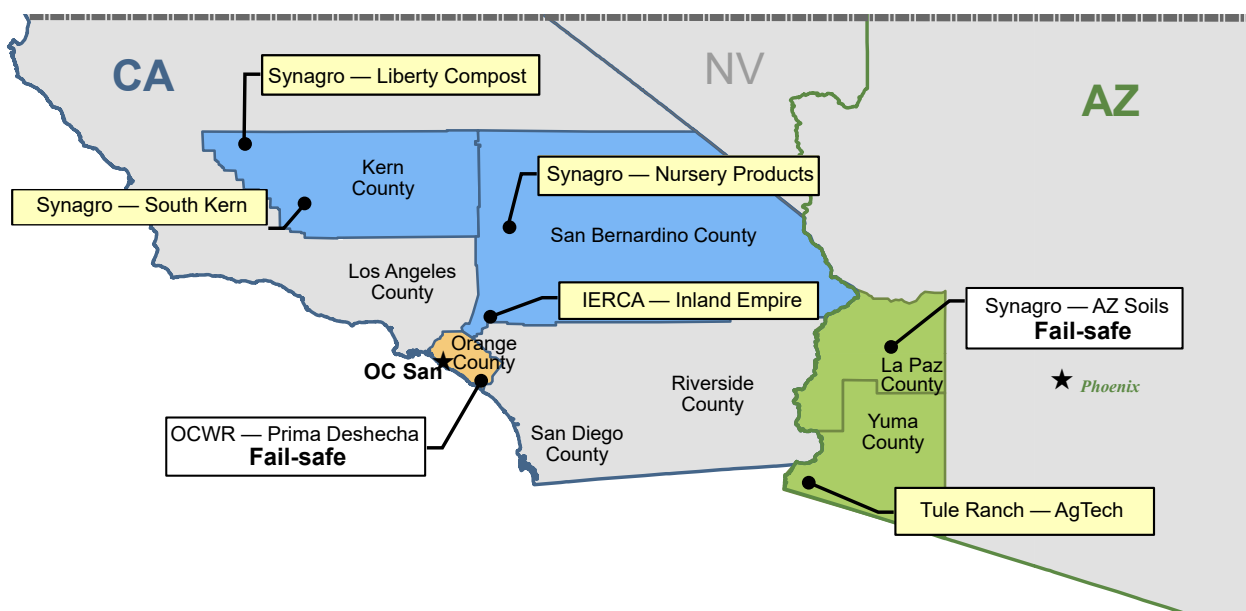
pounds of metals entering OC San's system by 90 percent, resulting in a 99 percent reduction of metals discharged to the marine environment and maintaining low-metal content in our biosolids as compared to levels in 1976.

Learn More

Visit our website at www.ocsan.gov/biosolids for more information. OC San encourages public input on our biosolids program. Contact **Rachel Van Exel** at **714.593-7407** or rvanexel@ocsan.gov.

- Annual Biosolids 503 Compliance Report: www.ocsan.gov/503
- Biosolids Contractor Requirements document: www.ocsan.gov/bcr

Orange County Sanitation District – Biosolids Management Biosolids End-Use Destinations



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