**WHAT ARE BIOSOLIDS?**
Biosolids are nutrient-rich, treated organic matter recovered through the treatment of wastewater.

**WHAT IS THE BIOSOLIDS PROGRAM?**
OCSD’s biosolids program consists of processes to ensure solids are treated onsite and used offsite (recycled) in accordance with all regulations and best management practices.

**HOW ARE THEY TREATED?**
Solids in wastewater (sewage sludge) are settled through the treatment process and treated (digested) to minimize pathogens (germs that cause disease) 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.

**WHAT IS BIOSOLIDS PROGRAM SUSTAINABILITY?**
OCSD needs to safeguard that our biosolids have a home for a long time to come. We use strategies such as diversity of management options and ensuring contractors follow best management practices to achieve program reliability.

**WHAT IS LAND APPLICATION?**
Land application uses biosolids as a soil amendment to fertilize farm fields to typically grow feed, seed, and fiber crops. 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, environmentally-friendly alternative to common petroleum-based fertilizers.

**HOW DO OUR BIOSOLIDS ENHANCE THE ENVIRONMENT?**
- Some of our biosolids are recycled and used as soil amendment on farm fields to create and maintain healthy soils and improve crop yields.
- Some of OCSD’s biosolids are further processed through composting to create a consumer-grade soil amendment that is distributed to agricultural, commercial and residential users.

**WHERE ARE OCSD’S BIOSOLIDS RECYCLED?**
The locations are listed on the map at the bottom of pg. 2 (www.ocsd.com/map).

**STATEWIDE POLICIES SUPPORT BIOSOLIDS RECYCLING**
In 2016, a 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 to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. As a result, local jurisdictions will be encouraged to use and purchase biosolids-based amendments and products.
Orange County’s biosolids are safe, highly-regulated, and meet restrictive Federal, State and local standards for recycling this resource. OCSD’s pretreatment program has reduced the average daily pounds of metals entering OCSD’s system by 85%, resulting in a 99 percent reduction of metals discharged to the marine environment and maintaining low-metal content in our biosolids since 1976.

LEARN MORE
Visit our website at www.ocsd.com/biosolids for more information and to sign up for periodic biosolids program newsletters using the “Keep me Informed” button. OCSD encourages public input on our biosolids program. Contact Deirdre Bingman at 714.593.7459 or dbingman@ocsd.com.

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