Yolo County Central Landfill (YCCL)

Composting Information and Frequently Asked Questions

May 31 ,2022

Organic Waste Material Program:

<u>Overview:</u> YCCL receives organic material and yard waste for processing and composting. Following the requirements of Senate Bill 1383, YCCL has increased the amount of organic material diverted from regular landfill disposal. The facility is permitted and operated under Tile 14 of California Code of Regulations, Chapter 3.1 Compostable Materials Handling Operations and Facilities Regulatory Requirements.

Anaerobic Compost Facility: Currently organic material (yard waste, food waste, and food soiled paper) is handled at the Anaerobic Composting Facility. This facility handles 52,000 tons of green waste, food waste, and other organic waste each year through a combination of anaerobic digestion and aerobic composting operation. The first phase (20 to 22 weeks) is anaerobic composting (without oxygen) which degrades non-woody organic wastes and creates methane, which is collected for the on-site electric generation power plant. The second phase is aerobic composting (with oxygen) that degrades the remaining organic material aerobically (at least 2 weeks). After the completion of the aerobic composting phase, the material is screened to remove non-compostable fraction and oversized material. The final compost is tested according TMECC (Test Methods for the Examination of Composting and Compost) by a certified laboratory according to US Composting Council's STA program. Compost quality is evaluated through an independent laboratory analysis for parameters such as carbon-tonitrogen (C:N) ratio, organic matter content, salinity total nitrogen, total phosphorus, stability, phytotoxicity, pH, maturity, boron, chloride, sodium, particle sizes, heavy metal concentration, and pathogen concentrations and other parameters before it is provided to customers. For additional information about testing parameters see link:

https://anrcatalog.ucanr.edu/pdf/8514.pdf

Compost that can be sold or otherwise provided to customers must meet California standard for every pile and to attain a temperature of 131 degree Fahrenheit (55 degree Celsius) or higher, and maintain that temperature for at least 3 days.

<u>Aerobic Compost Facility</u>: In July 2022, YCCL will be opening (along with Northern Recycling) a new state of the art Aerobic Compost Facility that will have an annual throughput capacity of 183,000 tons of organic waste. This will work in combination with the anaerobic facility.

Frequently Asked Questions (FAQs)

Question 1: What is composting and compost?

Answer 1: Composting is a natural biological degradation process that is controlled and accelerated at a composting facility. Composting is the transformation of biologically decomposable material through a controlled process of biological oxidation that results in the release of carbon dioxide, water, and minerals, and in the production of stabilized organic matter (compost or humus) that is biologically active. "The compost has undergone mesophilic and thermophilic temperatures, which significantly reduces the viability of pathogens and weed seeds (in accordance with EPA 40 CFR 503 standards) and stabilizes the carbon such that it is beneficial to plant growth. Compost is typically used as a soil amendment, but may also contribute to plant nutrients. Finished compost is typically screened to reduce its particle size, to improve soil incorporation." Taken from the US Composting Council website (https://www.compostingcouncil.org/page/CompostDefinition)

Question 2: What is organic material suitable for composting?

Answer 2: Pretty much anything that is not plastic, metal, painted, or treated with chemicals (e.g. pressure treated wood) is suitable for composting. We accept: fruits & vegetables; eggshells; bio-bags with food waste; meat, poultry & seafood; dairy products (no liquids); rice; beans & pasta; paper napkins & towels; paper cups & plates; paper take-out packaging; waxed cardboard; waxed milk cartons, etc.; greasy pizza boxes; coffee grounds & filters; tea bags; plants & flowers; yard trimmings & leaves; grass clippings & weeds. We do not accept: juice, soup and other shelf-stable cartons; plastics; glass; metals; dirt, rock & concrete; cat litter; pet waste (see questions and answer 8 below); non-compostable material.

Question 3: What happens to what you put in your green waste/organics toter?

Answer 3: After collection by the hauler, the green waste/organic waste is brought to YCCL. The material is run through a grinder/shredder then goes through the composting process explained above.

Question 4: What about weeds with seeds (such as Foxtails)?

Answer 4: Since the thermophilic composting (131 degree Fahrenheit (55 degree Celsius)) reduces pathogens, which is a fundamental requirement for feedstock processing and destroys most weed seeds as required by Tile 14 of California Code of Regulations, Chapter 3.1

Compostable Materials Handling Operations and Facilities Regulatory Requirements. For additional information about weed seed destruction under elevated temperature see link: https://ucanr.edu/sites/Solarization/files/112677.pdf

Question 5: What temperature does the composting material need to reach?

Answer 5: To complete the composting process, the material must reach 131 degree Fahrenheit (55 degree Celsius) 3 days. The composting process at YCCL generally reaches temperatures of 140 to 190 degrees throughout the aerobic composting phase that last at least 2 weeks. This in addition to the anaerobic phase of operation that is about 120 degree Fahrenheit (50 degree Celsius) for about 20 weeks.

Question 6: Why anaerobic composting in addition to aerobic composting?

Answer 6: Anaerobic composting produces substantial quantities of renewable biogas (methane) that is captured and used to generate electricity. Anaerobic composting also reduces the emissions of other gasses that might be released during industrial scale aerobic composting.

Question 7: What happens to the compost after it is finished?

Answer 7: Most is sold to local farmers for use on their fields. Some is set aside for Yolo County residents

Question 8: Is pet waste (poop) accepted in the curbside compost container or at the YCCL compost facilities with or without compostable bags?

Answer 8: No, we do not accept pet waste in the compost. Waste specifically from animals that consume meat products in their diet (dogs, cats, etc.) contain various parasites and bacteria not suitable for our compost process. Pet waste can also be high in nitrogen content making it an unsuitable fertilizer. However, waste from pets which eat a predominately vegetarian diet such as cows, horses, chickens, rabbits, etc. can be placed into the compost along with their wood shavings and straw. Additional pet waste resource:

https://avmcww.com/2020/02/26/parasites-and-poop-the-importance-of-picking-up-after-your-dog/

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