

California landfill turns to recycling and anaerobic digestion to reduce footprint and extend operations

New ReSource Center to be the largest reducer of greenhouse gases in Santa Barbara County

Slone Fox | July 07, 2020



The Tajiguas Landfill in Santa Barbara is adding a MRF and anaerobic digestion for organics, which is expected to extend landfill life by about a decade.

The Tajiguas Landfill serves Santa Barbara County by accepting around 200,000 tons of material each year. To align with new state laws, the county invested in the new ReSource Center, a project built on the Tajiguas Landfill that will increase recycling and organics composting while also reducing the landfill's carbon footprint.

Set to be fully operational by early 2021, the first phase of the project is a new materials recovery facility that will process municipal solid waste collected from the area, separating recyclables and organics from the trash. At the MRF, two 3D trommel screens, various sizing screens, air density separators, three elliptical separators, and 11 optical units will recover and separate paper and containers. MRF equipment is being supplied and installed by Van Dyk Recycling Solutions. Installation is nearing completion and is set to begin start up and commissioning by fall of 2020.

According to Van Dyk, the recyclables captured at the MRF will be baled and sold to market, while organics captured will move on to the second phase of the project, the anaerobic digestion facility. Here, organics are broken down and turned into compost and renewable energy. The energy generated by the ReSource Center (which also includes an existing landfill gas collection system) will be enough to power the system itself as well as 2,000 local homes per year.

Santa Barbara County estimates about 60% of incoming municipal solid waste material is either recyclable or compostable. The MRF is expected to recover that fraction from the municipal solid waste, significantly reducing the county's landfill contributions. This will extend the life of the landfill by up to a decade, while significantly reducing greenhouse gas emissions.

Once complete, the project will be the largest reducer of greenhouse gases in Santa Barbara County, slashing 117,000 metric tons of carbon dioxide from the landfill's output each year.