

CROWN RECYCLING MAKEOVER HELPS THE ENVIRONMENT AND THE COMMUNITY

Four-year, \$40 million project upgrades technology and encloses one of LA's leading recycling facilities

For more than 60 years, the Crown Recycling facility in north Los Angeles has been a local fixture as a leading recycling facility for the city and the region. It began as Crown Disposal waste hauling in 1960 and became a materials recovery facility (MRF) in 1974.

Athens Services acquired the facility and took over operations in 2017. The goal of the purchase was to build on Crown's reputation as a leading recycling facility by providing great service for the local community and the Greater LA region.

Crown is one of the largest solid waste processing and transfer facilities in the Los Angeles region. It is the only full-scale facility in the area that takes in and processes municipal solid waste, food waste, organics waste, construction and demolition waste, inert material, and other mixed waste material.

The Big Makeover

When Athens acquired the facility, Crown sat on a 7-acre, open-air site in a largely industrial area of Sun Valley. The facility is open to the general public and provides disposal capacity for several franchise cities and hauling companies.

As one can imagine, such a facility can generate a lot of dust, noise, and odor. In addition, recent local and state regulations have raised environmental standards on waste and recycling processing facilities. So Athens developed a four-year, \$40 million project to enclose Crown and update its technology.

"Ensuring the operations are conducted in fully enclosed buildings is the current best method for protecting the environment and the local neighborhood," said Enrique Gonzalez, General Manager.

The biggest challenge was completing a full-scale construction project while still maintaining the operations for daily business.

Enclosed Facilities Benefit Neighbors, Employees, and Customers

The most noticeable feature of the project is the construction of three new buildings that provide a combined 251,000 square feet of fully enclosed space for operations. The makeover includes new and upgraded equipment featuring the latest technology to improve operations and upgrade conditions inside.

“ *Enclosing the facility makes it a much more aesthetic site. A passerby cannot see, smell, or hear the operations running inside.* ” - Riel Johnson, Athens' Senior Director of Resource Recovery

A new dust collection system improves the environment inside the building. Dust and odor are mitigated with a negative air pressure system that draws outside air into the building and circulates it through roof ventilators equipped with misters that knock down dust and neutralize odors.

"It makes a better place for our employees and customers," Johnson said. The buildings have multiple environmental benefits, including the elimination of birds being drawn to the site, storage of rainwater from the roof in underground cisterns, and elimination of potential stormwater impacts.

Employing Technology Improves Quality of Processes and Material

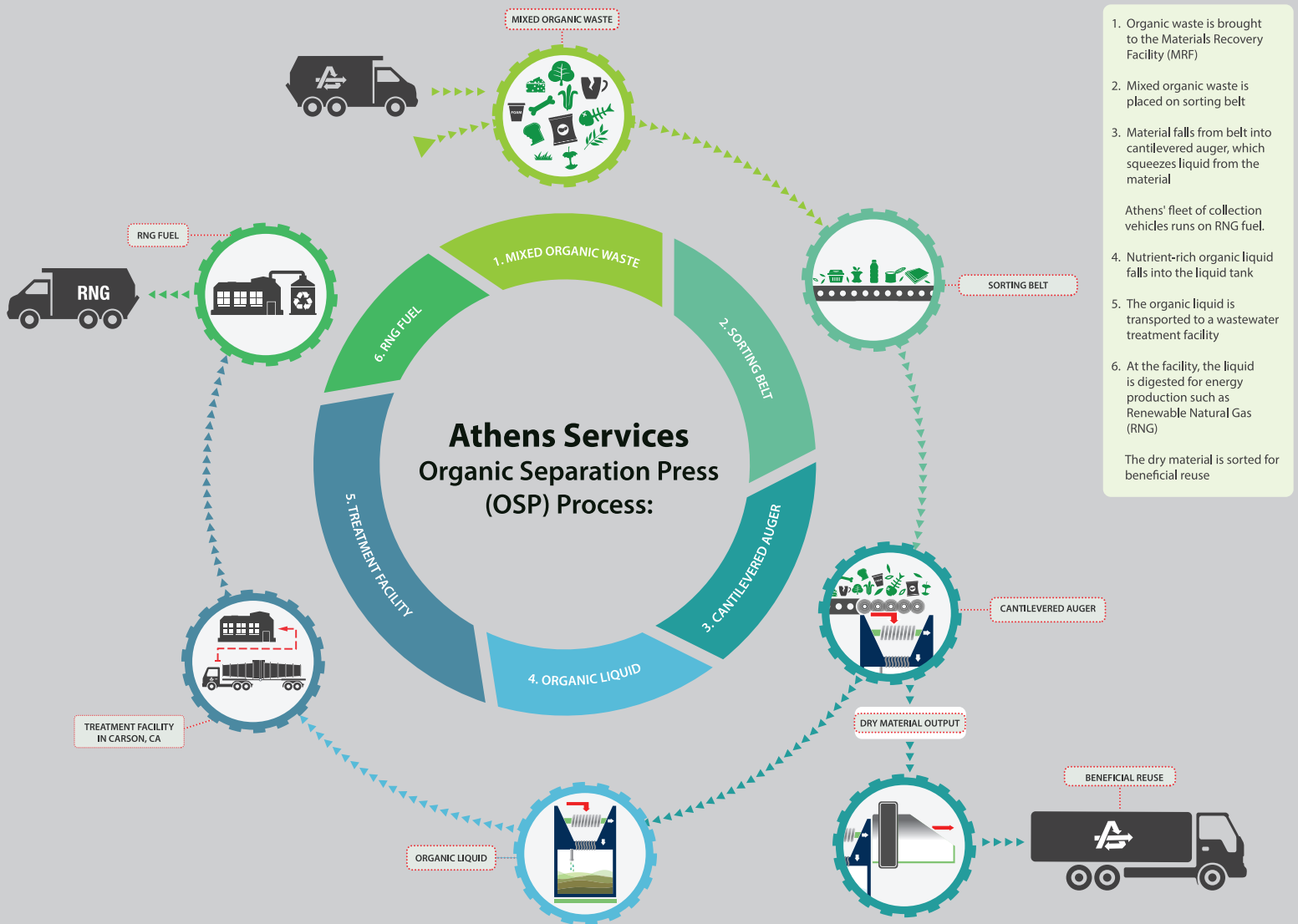
Crown is a leading recipient of construction and demolition (C&D) material. New equipment for processing C&D includes a 2-ton overhead crane for C&D maintenance and new Caterpillar loaders for loading, sorting, and excavation.

A new electric grinder and trammel processes C&D wood material. The grinder helps to make higher-use end products from lumber recovered from construction waste.

Customers bringing in and unloading material will notice three new inbound scales and a new outbound scale. “The goal is to get our customer in and out as quickly as possible and to reduce their idle time while waiting in line,” Johnson said.

OSP: The Crown of Crown

For the first time, Crown will feature an organics processing line to recover organics waste liquid from mixed waste. A Komar organic separation press (OSP) combines high pressure with low energy usage (compared with other technology) to squeeze the organics out of the waste stream in a simple, continuous process. Athens is the only company in Southern California to employ this pioneering technology.



1. Organic waste is brought to the Materials Recovery Facility (MRF)
 2. Mixed organic waste is placed on sorting belt
 3. Material falls from belt into cantilevered auger, which squeezes liquid from the material
Athens' fleet of collection vehicles runs on RNG fuel.
 4. Nutrient-rich organic liquid falls into the liquid tank
 5. The organic liquid is transported to a wastewater treatment facility
 6. At the facility, the liquid is digested for energy production such as Renewable Natural Gas (RNG)
- The dry material is sorted for beneficial reuse



“The OSP is a very economical machine that effectively separates the organics from mixed waste loads,” Johnson said. It is the second OSP Athens has installed, the first one being at the City of Industry MRF. Liquid waste from the machine is sent to a wastewater treatment plant for anaerobic digestion. Potentially, the liquid could be used for vehicle fuel, reducing greenhouse gas emissions.

The new design features 30% more torque, a rear removable auger design for in-place maintenance, and a rapid rebuild dewatering section with easily replaceable sections. Processing capacity ranges from 40 to 50 tons per hour.

“*The new OSP250 design leverages three years of continuous experience at Athens, resulting in a robust machine. We are pleased to support the Athens organization’s efforts to maximize recovery from mixed waste and product depackaging.*” - Doug Vanderlinden, Komar Director of Municipal Projects



By sorting organics from mixed waste, the OSP also diverts material from landfills that would otherwise decay and produce greenhouse gas emissions. This is especially important as SB 1383, California’s regulation governing emissions of short-lived climate pollutants, takes effect on Jan. 1, 2022.

“The OSP provides us with high diversion and processing results required to comply with increased standards for local municipalities and the State of California,” Gonzalez said.

A longstanding staple of recycling, especially for heavy C&D materials, Crown is building on its past by equipping in the present for success far into the future. Find out more at AthensServices.com/Crown.