

**W**hile I was born and raised in Alabama, I traveled around the U.S. in my mid-to-late 20s—eventually settling in Colorado for a few years and then in Florida for a few more. I moved back to my home state in 2018 when the Environmental Manager position opened up at Constellium in Muscle Shoals, AL. At the time, Muscle Shoals made up more than 50% of all Constellium's landfilled waste worldwide. We knew we had a problem, but tracking the waste was limited and the effort just was not there. A core team was built, and we hired a company called Waste Connections that seeks out different recycling avenues.

Here, it's much more expensive to recycle than to landfill. The cost is in the transportation—we've had to send some waste four states over to recycle it. But having support from Constellium's leadership has meant the world, and we have worked diligently to find new avenues. We accept a lot of pallets, and they weigh a lot, increasing the price of landfill. Now, we send them to a local company that turns them into wood pellets for heat. We found a company in Tennessee that refines waste oil, and another that takes refractory brick and crushes it into aggregate for roadbeds.

We're trying to change the culture on the shop floor, too. Recycling in the city has only been around for five to ten years, so to ask a facility of 1,200 individuals to start recycling when they've never thought about it in their lives was a challenge. We realized that to get people to care, we had to hit home. We are right on the Tennessee River, and people in Alabama really love the outdoors and care about the river that they enjoy using. So we put hundreds of posters throughout the plant talking about waste segregation and why it was important for them. We've had multiple trainings, continuous focus on TV monitors, competitions, and color-coded recycling bins. We reduced landfilled waste by about 7,000 tons in 2020, with a 10% increase in production. And, we've gone from recycling 3,000 tons in 2018 to around 10,000 in 2020. I believe people will do the right thing if they are given the appropriate knowledge, and if you can make it easy for them.



**BENJAMIN YANCEY**  
ENVIRONMENTAL MANAGER  
MUSCLE SHOALS, U.S.

**“WE’VE GONE FROM RECYCLING 3,000 TONS OF WASTE IN 2018 TO AROUND 10,000 IN 2020.”**

# LIMITING LANDFILLED WASTE



**We succeeded in reducing the amount of landfilled waste we generated in 2020, thanks to several different initiatives at our various sites.**

## Our challenges

Due to the nature of our industry and some of our operations, several of our sites produce landfilled waste. We seek to minimize this waste and have the smallest possible environmental footprint.

## Our policies and actions

Our *EHS FIRST* policy and EHS Directives and Guidelines provide a framework for environmental management across our sites, including programs for landfilled waste and increased material reuse and recycling. For years, Constellium has been recycling more than 80% of its waste.

Through data collection, better waste segregation, improved reuse or recycling of waste, technology, and teamwork, we aim to significantly reduce what we send to landfill. Since waste is the result of various streams depending on the activity, size, and location of our plants, we have different targets and organizations at each of our sites. We focus mostly on seven plants that generate over 95% of production waste sent to landfill: Muscle Shoals, Ravenswood, and Van Buren (U.S.); Issoire, Neuf-Brisach, and Ussel (France); and Děčín (Czech Republic). Generating less landfilled waste can only be achieved with plant-wide efforts. For instance, installing sorting bins is not enough; we must ensure that our employees use them correctly.

There are still two big challenges that we are addressing along with our partners and networks. The first concerns production waste categories for which there is currently no identified technical recycling solution. The second is our ability to recycle municipal waste, which relies on local recycling facilities.



## OUR RESULTS

We achieved our 2020 target of 10% landfilled production waste reduction versus 2015, by sending 33% less production waste to landfill than in 2015. A number of sites made good progress, irrespective of a drop in production due to Covid-19. One site that made excellent progress was Muscle

Shoals, where workers vastly improved segregation of the main types of waste, thereby increasing the capacity for recycling solutions. A contracted supplier brought in to manage the waste found ways to recycle refractory bricks, sludge oil, and flue gas. Trash sent to landfill from the site decreased

by more than 60% versus 2019, and recycling of wood pallets increased by a factor of 4. Ravenswood also initiated a program to better segregate waste and address flue gas dust, with a new recycling committee that is boosting employee awareness and putting recycling stations at individual work centers.

2021 TARGET	INDICATOR	2019	2020
Reduce production waste (construction waste excluded) going to landfill by 10% vs. 2015	% variation of quantity of production waste sent to landfill	-7.1% vs. 2018 <sup>(1)</sup>	-33% vs. 2015

(1) This was still above 2015 levels due to better reporting of waste and the introduction of new sites.