Marcos Gorrin Linares manages waste collection on the Island of Tenerife

BY TIMOTHY BYRNE

Introduction

Tenerife, the largest of the Canary Islands, is one of Europe’s most popular tourist destinations. The island’s warm climate attracts five million holidaymakers every year, so managing the collection and treatment of municipal solid waste is a very important task.

On the south west coast of the island is the district of Santiago Del Teide, located close to the island’s active volcano Mount Teide, the third largest in the world. The district is made up of several towns, villages and coastal resorts, for example, El
Molledo, El Retamar, Tamaimo, Los Gigantes which also has the highest volcanic cliffs in Europe, Puerto de Santiago, and Playa de la Arena.

Waste Collection

Waste is collected from this district by the family owned business Marcos Gorrín Linares SL which has been collecting waste in this district for many years. The company specialises in waste collection, garden maintenance and plant nurseries.

Waste is collected in 660 litre containers, since there is limited space to place 1100 litre containers in the district. The containers are located in communal collection points along the street, where up to six 660 litre containers are stored. Although these containers are smaller than the 1100 litre option, the number of 660 litre containers stored in each communal point have adequate capacity for the waste produced. Members of the public, tourists, and the retail outlets and bars place their residual waste into these containers. In each compound there is also an igloo for glass bottles, paper and card recyclables etc. The recyclables are collected by a third party on behalf of the Island’s council.

There is also an underground waste collection system in operation in the three coastal resorts. Waste is placed into loading apertures at street level, and then falls into a roll on off container stored below street level. This helps to improve the area’s appearance and keep odour and vermin to a minimum in the warm weather.

In Santiago Del Teide, waste is collected at night from 22.00 hours until 05.00 hours next morning. The collection service is operated seven days a week, 365 days a year. There are three waste collection vehicles operating in the district of Santiago Del Teide. The vehicles feature Renault Premium two and three axle chassis with Geesink GPM11 and GPM111 bodywork mounted to them. To facilitate the emptying of the 660 litre containers, a GCB1000 lifter is fitted to each of the refuse collection vehicles. The collection crew have the option with the GCB 1000 lifter to either empty the containers with the trunnion arms or the comb bar. There is also an old
Renault Premium Ros Roca Cross refuse collection vehicle to cover servicing and maintenance intervals for the newer collection vehicles.

The vehicle is manned in the spring season with a driver and one loader, the driver helping the loader place the containers at the rear of the refuse collection vehicle to be emptied. In the summer season when there are more tourists, each vehicle is manned with a driver and two loaders, to handle the extra waste produced in the district.

The roll on off vehicle also collects the full roll on off containers from the underground waste collection systems at night. The roll on off vehicle travels to the different underground waste collection systems with an empty roll on off container so reloading of fresh waste can continue.

Access is gained by lifting the hydraulic door which covers the diameter of the roll on off container. The driver of the roll on off vehicle opens the hydraulic door via controls that are connected to the communal collection point. Then he retrieves the full container lifting the container with his roll on off vehicle. Once the full container has been lifted to road level he dismounts the container and covers the load with a net.

It is the policy of Marcos Gorrin Linares SL that all refuse collection vehicles finish together. If one vehicle is finished before the other two, the driver and loaders have to go and help the other two vehicles finish their collection round.

Each refuse collection vehicle collects one / two loads a night depending on the number of tourists in the resort and the amount of waste being generated. Once all of the vehicles have finished their collection rounds they travel together, with the roll on off vehicle carrying the underground waste collection containers to the waste transfer station in Guaza - Buzanada.
Bin Washing

Marcos Gorriín Linares steam cleans all of the 660 litre containers once they have been emptied. The vehicle carrying out this work has the capacity to carry 7000 litres of water. The water is heated so that when the containers are washed they are disinfected to eradicate any odours or germs left from the waste collection process. This service is carried out in all districts of Santiago Del Teide.

Waste Transfer Station Guaza - Buzanada

All waste produced from Santiago Del Teide, and from the neighbouring districts of Guía de Isora, Adeje, Playa de Las Americas and ARONA (Los Cristianos) is delivered to the waste transfer station at Guaza - Buzanada.

The facility is one of four operated on the island of Tenerife by (UTE) a company formed by both Vertresa, and Urbaser. The facilities are located at: Buzanada, La Guancha, Jardín Botanico and San Matías. They are open in the evening for twelve hours and take the majority of waste which has been collected from the island during
the night. On arrival, all refuse collection vehicles are weighed on the computerised weighbridge. Once weighed, the refuse collection vehicles proceed to one of two static compactor loading apertures. They reverse up to the unloading aperture and the driver discharges its load into the compactor. The waste is compacted into hermetically sealed roll on off compaction containers. When the roll on off containers are full they are collected from the compactor by a roll on off vehicle operated by (UTE) - (Vertresa / Urbaser). A fresh container is unloaded and fixed to the compactors’ loading apertures so that the reloading of waste can continue.

Sanitary landfill site of Arico

The waste from all four waste transfer stations is delivered to the sanitary landfill at Arico in the south east of the island also operated by (UTE). The waste is land filled under sanitary conditions, and the site complies with the European Union Landfill Directive. The facility boasts a methane extraction system, where the methane produced from the waste decomposition is extracted from the landfill body and harnessed through a turbine. The electricity produced from this process is exported
to the national grid. Leachate is treated on site in the leachate lagoons at the desalination plant. Once it has been purified, the leachate is discharged into the ground water sewerage system.

The facility also boasts storage facilities for recyclable materials collected from across the island before they are transported for reprocessing, for example, glass, paper, aluminium, steel cans, plastic as well as construction and demolition waste.

In conclusion, waste collection and treatment in Tenerife is managed to a very high standard. Marcos Gorrin Linares SL operates a very efficient and professional waste collection and bin washing service in the district of Santiago Del Teide, making it one of the cleanest districts on the island. Maybe some of the other municipalities on the island should look at the services provided in Santiago del Teide to achieve similar high standards of cleanliness.