

SUMMARY

Landfills aren't something that gets talked about often, but they're definitely significant when it comes to keeping our environment clean and safe from disease spreading. Waste management is crucial for the smooth maintenance of waste reduction around us, so it's essential to keep incoming waste supervised and regulated.

It's no secret that in order to dispose your waste in landfills, tipping fees must be paid. Disposal costs depend on the waste amount. Hence, waste services require instant and accurate weight calculations to determine the tipping fee.

CHALLENGE

The scarcity of space in landfills is alarming, pushing us to think of supervising options for their capacity and waste charging fees. The main challenge is to establish a connection between the waste-weighing system components, which would allow obtaining accurate weight measurements of waste to designate its space occupation and exact cost.

Besides managing waste weight and tipping fees, other functions and operations of transfer facilities and landfills need to be taken care of too. Monitoring the amount of disposal oil and supervision over areas like inventory management, reporting, or statistics are just as necessary.

Since manual data collection is too time-consuming and prone to human errors, all the calculations, maintenance, and monitoring of processes need to be digitalized. In other words, all the information needs to be accessible through management software that's powered by network connectivity. By having this option, companies will be able to obtain and use data for an efficient workflow.

SOLUTION

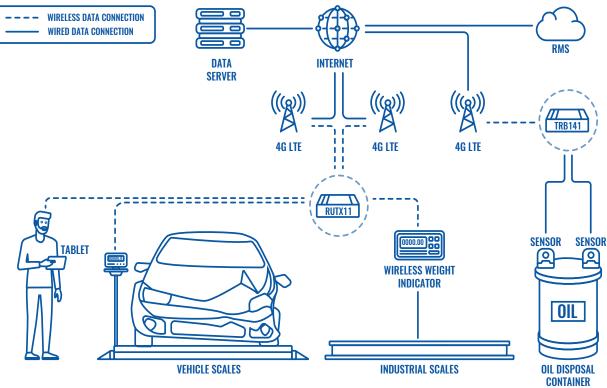
The solution for this case begins with industrial scales that measure and calculate weight-dependent waste disposal fee. With the help of network connectivity, all information collected from the weighting system gets instantly transferred to the monitoring software via Wi-Fi, which can be accessed by any connected device, like a computer or tablet. Immediate data allows for the fees to be assigned quickly and without errors.



The cellular RUTX11 router enables you to connect as many industrial scales as needed to the management software wirelessly. And although landfills and transfer stations are usually located far away from urban areas, this router provides its data accessibility even in rural locations.

The solution is accompanied by the TRB141 gateway. This device, connected to liquid level sensors of oil disposal containers, sends constant information about container capacity levels to the landfill data server over a wired connection. Once the capacity levels are reached, the sensors give notice to the monitoring software, alerting that the containers must be replaced.

TOPOLOGY



BENEFITS

- The RUTX11 router provides fast and reliable 4G LTE CAT 6 connectivity with an auto-failover option ideal for communication without interruptions;
- Featuring Dual-Band Wi-Fi 5 802.11ac, the RUTX11 router becomes the perfect option for when high data transmission or robust wireless performance is prioritized;
- The TRB141 gateway excels by its low power consumption and is advantageous for continuous data transmission capabilities;
- Both RUTX11 and TRB141 are designed to be easy to use. Their installation and maintenance do not require any particular training or know-how.

WHY TELTONIKA NETWORKS?

Reducing the risks of human errors ensures efficient and smooth management of transfer stations and landfills. Devices like RUTX11 and TRB141 are easy to use and reliable, ensuring simple and smooth workflow in any industry. Teltonika Networks devices are perfect for cases like these, where strong and stable network connectivity is crucial for the efficient functioning of facilities.