IDTECK

CASE STUDY

Waste Truck Management Solution with RF245

→ **Location :**
Solid Waste Collection Site,
City of Lahore, Pakistan

→ **Products Used :**
RF245 2.45GHz Long Range Readers
IDA245 2.45GHz Long Range Active Cards
iCON100 Access Control Panel

→ **Application :**
Fleet Management System Combined with
Access Control System

Solid Waste Collection for the City of Lahore, Pakistan

The city of Lahore, referred to as the cultural heart of Pakistan, is the capital of the Pakistani province of Punjab and the second largest city in Pakistan. For the solid waste management solution for over eleven million population of the city, the Government of Punjab manages a fleet of over 450 waste collecting trucks in charge of collecting waste from all the different locations of the city.
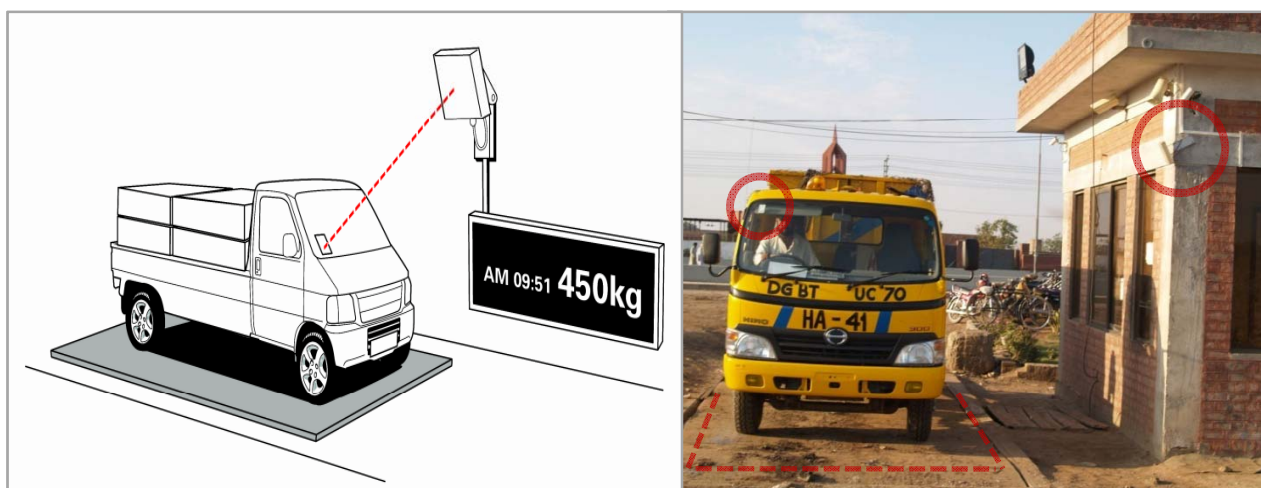
The Challenges

The Government of Punjab was paying the waste truck drivers on their performance bases, which meant that the more waste the truck drivers collected, more money they took home. It was a difficult task to keep track of the weights of the waste as they were measured and written down manually on the book that was kept separately by each truck driver. Since there was no adequate monitoring system, the drivers were tempted to take advantage of the situation. There were often cases where the truck drivers, in accomplice with the person in charge of recording the weight, would jot down false number as they increased up to 25% more weight than the actual collection of waste.

The government funds, which were consisted of the tax money from the citizens of the city, were going to waste.

Another issue that they were faced with was the mismanagement of the fuel used in the trucks. In similar context with the inaccurate weighing of the waste collection, the Government of Punjab didn't have a way of tracking the fuels used in the trucks. The fuel usage has been kept in track manually and no audits or reports existed on how the fuels were used. The consumption of the fuels increased drastically until it got out of control and the administrators decided to take an action.

The Solution

Time & Xcess, IDTECK's distributor, suggested one of a kind solution for this unique situation. All the waste weighing stations were equipped with automatic weighbridge, which sends the measured weight directly to the computer. At the same time, IDTECK's RF245, long range readers integrated with iCON100, access control panel, recognizes the IDA245 tags attached on the windshield of the trucks to read the designated truck number to be store in the database along with the measured weight. The waste trucks were allowed to enter the waste dumping site after the exact weight has been measured. As the trucks dumped the waste off at the site, they were asked to report back to

the weighing stations for second weighing to calculate the exact measurement of the actual waste that has been collected and dumped.
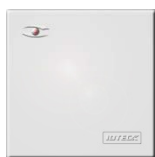
In addition, the RF245 tags were utilized to allocate the trucks the different areas of the cities. The long range readers, RF 245, which boasts up to ten meters of reading range, are implemented at every weighing station to identify the truck's credentials and permit access to only the assigned trucks. This allowed the administrators to manage the fuel consumption of the trucks as they are only permitted the travel certain distances per day.

After the Successful Deployment

After the implementation of the IDTECK system, the administrators of the Government of Punjab were astonished to see the immediate results. It eliminated all the unauthorized trucks as well as the personnel from entering the site, which eradicated all the illegal waste dumping. With the proper monitoring now in place, there was no room for mischievous act from the truck drivers and staffs. The administrators also noticed a significant drop in the fuel usage as they saved 5 million Rupees on fuel within just the first month.

About IDTECK

Long experience in biometric access control and time & attendance field, IDTECK products assure the most reliable technology out in the security market. IDTECK offers wide range of security products, to provide the best security solution to suit your needs. All of IDTECK products are certified by UL, CE, FCC, MIC, and RoHS to satisfy the standards for international exports.

[RF245]
• 2.45GHz Long Range Reader
• Read Range up to 10M (3M, 5M, 10M)
• Multiple Tags Identification (30 Tags/sec)

[IDA245]
• 2.45GHz Long Range Active Card
• Battery Replaceable
• User Programmable Site Code, ID Number