

CASE STUDY

Municipal Authority WASTE MANAGEMENT MODULE at city garbage dump



A municipal authority wishing to streamline garbage disposal undertaken by multiple contractors, who charge per trip undertaken and weight carried. RFID tracking makes verification possible to prevent fraudulent operating practices.

Company:

Ahmedabad Municipal Corporation, Ahmedabad, India

Facility: Dumping ground

Challenge:

- Multiple contractors for garbage disposal making multiple trips to dumping ground. Each contractor charges per trip undertaken and weight of garbage. Need to verify trips and weight carried to prevent overcharging, identity confusion and fraud.



Proposed Solution:

- Each garbage container and garbage truck is affixed with a specialized Metallica™ tag that is damage-proof and fire-proof. Xtenna™ Reader/Antennas are mounted at the gate, at the weighbridge and in the dumping area.
- Waste contractors manning the truck are provided with Personna™ tags for identity verification.
- Xtenna™ mounted at the gate does inward verification of the garbage container and truck, and also of the driver. At the weighbridge, the garbage is weighed and data is transmitted to the database by Essen RFID's Waste Management System. Xtenna™ in the dumping area monitors that the truck has logged in for unloading. The truck and driver are once again tracked at the gate on their way out.
- The system verifies the truck and driver for each garbage contractor and logs in each trip and weight carried, preventing fraudulent trips, overcharging and identity confusion.

Realised Benefits:

- Streamlined operations
- Prevention of cheating and fraud

TECHNOLOGY

Solution:

EPC Gen2 compliant asset and personnel tracking system

Tag Type:

Metallica™ UHF Passive,
Personna™ UHF Passive

Reader/Antenna:

Xtenna™ Long Range

Read Range:

17 metres (50 feet)

Method:

Multiple Tracking via Integrated
Reader/Antenna modules

Number of modules: 3

Integration Platform:

RFID Middleware: Xtenna™ Studio

Application: Essen RFID's
Waste Management System

Database: SQL Server 2005 Exp. ed.

Tag Manufacturer/Supplier:

Essen RFID

Reader/Antenna Manufacturer:

Essen RFID

Systems Integrator:

Essen RFID

For further details contact:

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