

7. GPS-BASED VEHICLE TRACKING AND MONITORING SYSTEM (VTMS) FOR SWM – INDORE

“Achieve ZERO WASTE status for Indore”

– Part of vision as expressed in the Smart City Proposal (SCP) for Indore

CONTEXT

Indore is known as the commercial capital of Madhya Pradesh. It is also one of the largest and most populous city in Madhya Pradesh with a population of 1,964,086 (according to the 2011 census). The Swachh Sarvekshan Survey 2017 ranked Indore as the cleanest city in India.

Indore Municipal Corporation (IMC) considers sanitation and Solid Waste Management as priority areas for the city. The city is aiming for 100% coverage of Solid Waste Management. Timely clearing of secondary collection bins and transportation has been a major issue in Solid Waste Management in Indore – around 750 open garbage dumps in the city were not cleared regularly until recently.

THE INTERVENTION

Project description

To ensure efficient Solid Waste Management a GPS based Vehicle Tracking and Monitoring System (VTMS) has been taken up as a significant step recently. The key features of the project are:

- Online real-time monitoring of garbage vehicle movement and effective enforcement through a web based Vehicle Tracking and Monitoring System (VTMS)
- Web based application for real-time route adherence of garbage vehicles using data feeds
- Installation of IP cameras at entry and exit of the landfill site
- Integrated Weighbridge Vehicle Monitoring System (IWMMS) at the entry and exit points
- Integration of VTMS with the Central Command and Control Centre
- Training to stakeholders for managing the complete VTMS eco-system

Key outputs/ outcomes

The project became operational since 1 March 2017; as on 16 May 2017, more than 90% garbage vehicles (more than 700 of 750 vehicles) had already been included in the system. The project has led to real-time monitoring of garbage vehicle movement ensuring tracing of collection route and improvement in solid waste handling and operational efficiency.

Impacts

The VTMS is expected to ensure regular clearance of garbage dumps and help the city to achieve 'Zero Waste' status. The system will contribute significantly to cleanliness and public health in the city.

Support and mobilized resources

Indore Smart City Development Limited (ISCDL) has appointed a Master System Integrator (MSI) for Implementation of Command Control and Communication Centre. Implementation of GPS-based Vehicle Tracking and Monitoring System (VTMS) is one of the services provided by the MSI. The component for GPS-based VTMS has been tendered at a costs INR 1.8 crore.



Main Dashboard of the GPS based Vehicle Tracking and Monitoring System for Solid Waste Management in Indore