

## **Opportunities in Waste: Resource Management in the Institutional Context**

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Resource Management (RM) is an emerging trend in waste contracting that is gaining considerable ground. Waste generating organizations engage the assistance of external contractors to drive resource efficiency through enhanced source reduction, recycling, and recovery. Consistent with many current supply chain trends and CMS, it offers promise for a cradle-to-grave service approach to waste management.

RM is premised on the idea that contractors will provide more value added services when offered proper financial incentives. Contractor incentives are created by linking contractor profit to the cost savings they achieve for customers in their waste, recycling, and materials management program. This arrangement enhances recovery of readily recyclable materials such as corrugated cardboard and wood pallets while promoting market development opportunities for difficult-to-recover materials such as paint sludge and solvents.

Waste generating organizations are beginning to recognize that RM contracting is fairly easy to implement and produces many short- and long-term benefits. The use of RM has seen considerable growth in industrial sectors. In the past year RFPs for RM have been issued by many companies, including Raytheon, Kodak, and Harley Davidson.

RM has also gained ground in the commercial/institutional sectors, its application in schools are of particular note. Below are two case studies describing RM programs in a hospital and a school district. CSP is currently conducting pilot programs with the Lansing School District to test the feasibility of RM bundled with a CMS offering. In addition, CSP is working with the Minnesota Office of Environmental Assistance and Ramsey County in Minnesota to pilot RM at the Independent School District 196, the Mahtomedi School District, and Macalester College.

For CMS providers, RM is consistent with the waste reduction activities they generally provide as value-added services. RM offers an opportunity to expand the suite of services offered by a CMS provider either directly or by partnering with waste management companies.

### **Case Study 1: Lemuel Shattuck Hospital, Jamaica Plain, Massachusetts**

Lemuel Shattuck Hospital, the primary provider of outpatient and inpatient services for the Massachusetts Department of Public Health in the Metro-Boston Area, contracted with Save That Stuff, Inc (STS). The contract, three years with three one-year renewal options, began July 2003 and contains waste and recyclable components. The waste component has a separate pick-up hauling fee and per ton waste disposal fee. The recyclable component has a per pick-up hauling fee, rental fee for equipment (compactor), and a 50/50 cost savings split incentive. Originally paper and electronic recycling only, STS has expanded the recycling program to cover cardboard, organics, wood pallets, and scrap metal. STS will also begin management of medical waste.

STS subcontracts with a trash hauler and medical waste company. Within the first year of the program, Shattuck Hospital has experienced significant benefits as a result of RM contracting, including cost savings, comprehensive recycling services, more transparent reporting and billing, and optimized waste hauling services. Specific Benefits include:

- In the first year, trash tonnage to landfill decreased by 11% and recycling tripled;
- The frequency of waste pick-up was reduced from three to two times weekly;
- STS provides more transparent billing, with waste and recycling tonnage and costs broken down by material stream; and

- Shattuck saved roughly \$11,000 in its first year of RM.

**Case Study 2: West Des Moines Community School District, Des Moines, Iowa**

The West Des Moines School District (WDSD) contracted with Artistic Waste Services, Inc., a local waste hauler, and EnviroCon Consulting. The contract contains separate waste and recycling service fees, rental fee for equipment (compactor), and a 50/50 gain sharing split incentive. The recycling program includes mixed paper, cardboard, and tin cans.

Within the first year, WDSD credits RM for raising the awareness of students and teachers on source reduction and recycling, and for institutionalizing a school district-wide recycling program. Specific benefits include

- The recycling rate has increased from 2% to 20% after RM was instituted, with an average across all schools of 20% and a 40% rate estimated for 2005.
- Artistic provides transparent invoices that break down waste disposal and recycling costs by facility. They also note how full containers are when tipped which has led to some reduction in service levels.
- The RM program initially focused on readily recyclable materials (such as paper and cardboard recycling), but anticipates extending recycling to other waste streams, such as food waste from the cafeteria.
- Waste and recycling costs have remained constant, but WDSD has been able to get additional service, institute a comprehensive recycling program, and dramatically increase recycling while keeping their waste/recycling budget constant.

The greatest challenge in implementing RM at WDSD and potentially other school districts, is the slow decision making process and organizational structure involved in a school district. However, with more positive examples of school districts adopting RM, this barrier could potentially be significantly reduced.