Southwest RSWC

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Organization Background

The Southwest Regional Solid Waste Commission (SWRSWC), which consists of Cottonwood, Jackson, Lac qui Parle, Lincoln, Lyon, Murray, Nobles, Pipestone, Redwood, Renville, Rock, and Yellow Medicine Counties, is a 12 county Joint Powers Board whose goal is to foster an integrated approach to solid waste management in the region. The board was created to advance abatement and recycling programs and develop an integrated solid waste management plan for the counties for the next ten years. The focus of the plan is to promote source reduction and recycling.

"This internship gave me the opportunity to tackle real-life challenges in my community. I gained valuable experience in time-management, a strong understanding of solid waste infrastructure, and a chance to use my classroom knowledge to make an impact. Working with great people helped me develop my communication skills and make the internship a fantastic experience overall." ~NL

Project Background

The purpose of this project was to develop a replication model that businesses can use to conduct their own solid waste assessments and to provide direct solid waste assistance to local businesses on behalf of the counties. Nine solid waste assessments were conducted at businesses of varying types and sizes. Reports were drafted for each business detailing recommendations to reduce waste and improve recycling. These reports included cost justification and approximations of the amount of waste that could be diverted from the landfill. In addition, the intern developed the replication model with assistance from county staff and marketed it through local Chambers of Commerce. The project also laid the groundwork for establishing and advertising reuse networking in the area, including via the Minnesota Materials Exchange and a waste-to-feed network.

Incentives To Change

The integrated solid waste management plan was developed to emphasize source reduction and recycling, as both are essential to achieving the reduction and recycling goals outlined in the plan. Solid waste abatement and diversion to recycling has numerous benefits. Recycling can be more cost effective than disposal because it allows the counties to generate revenue from recycled materials. Waste reduction and recycling also reduce the volume of waste that enters the landfill, increasing its lifespan. Local businesses also realize cost savings through reduction, as generating less waste reduces purchasing, handling, and disposal fees.

Solutions

Approach to Project

Part 1: Assessments

For the first part of the project, the intern conducted nine assessments at small businesses in the three counties. Each assessment took approximately 1-3 hours and involved a visual approximation of waste composition, a facility walkthrough, interviews with staff at all levels of the organization, and follow up questions after the assessment was completed. The intern conducted research and drafted reports containing waste reduction and cost savings recommendations for implementation. These reports included site-specific recommendations as well as general reduction tips. After the reports were submitted to the businesses, the intern followed up to gauge progress on implementation and answer questions.

Part 2: Develop replication model

The second part of the project was to develop a replication model for business owners to use in their own businesses to identify solid waste reduction opportunities. Conducting the solid waste assessments familiarized the intern with the process and gave the perspective necessary to tailor the model to business owners. The model is applicable to any type of small business. Information about the replication model can be found here: www.mntap.umn.edu/industries/waste/tools.html.

Part 3: Networking

The last part of the project involved networking activities. Once the model was developed, it needed to be advertised and promoted to businesses around the region. The intern worked with local Chambers of Commerce to advertise and disseminate the model. The intern also worked to publicize the Minnesota Materials Exchange, a statewide reuse network, and develop a network to facilitate waste-to-feed connections, which allow businesses with food waste to give it to local hog farmers as opposed to throwing it away. These networks help simplify the waste reduction process by providing more reuse options to business owners.

Summary of Assessments

Nine assessments were conducted during the project. The types of facilities visited included automotive services, restaurant/food service, warehousing, fitness/recreation, manufacturing, pharmaceuticals, and printing/publishing. The most common recommendations made were to establish a waste-to-feed connection, utilize reusable transport packaging, practice rigorous inventory management/purchase monitoring, and prioritize the use of electronic media over paper.

Total savings for the top recommendations are:

- Waste-to-feed: $500 and 65,300 lb
- Reusable Transport Packaging: $2,500 and 16,000 lb
- Rigorous Inventory Management: $1,500 and 3,300 lb
- Prioritizing Use of Electronic Media: $9,800 and 23,600 lb.

Waste reduction and cost savings potential by sector, as well as the total savings potential

Sector	Annual Reduction (lb)	Annual Savings
Automotive Services	1,600	$7,900
Restaurant/Food Service	62,200	$1,700
Warehousing	20,000	$11,000
Fitness/Recreation	24,000	$9,900
Manufacturing	10,000	$5,000
Pharmaceuticals	1,500	$300
Printing/Publishing	2,900	$400
TOTAL	**122,300**	**$36,300**