

Staff Report

## RECYCLING OPTIONS FOR AMES

July 14, 2015

### **BACKGROUND:**

The City Council recently requested staff to evaluate ways in which the City or another entity might provide the services formerly provided by the Ames Area Redemption Center (AARC). From 1989 until its closure in February 2015, AARC accepted cardboard, newspaper, white paper, mixed paper, plastics, glass, and metals (referred to in this report as **recycling**), and provided the nickel deposit back on cans and bottles (referred to in this report as **redemption**). In all cases, AARC served only as the collection point for these materials, packaging them for transport to a third party.

AARC was dependent on two primary revenue streams. For its redemption service, every redeemable can and bottle processed generated a one cent payment from distributors. The other major source of income was selling products into recycling markets. For many years, cardboard provided a steady income stream as it was a desired product for recycling. When contacted in February, former AARC co-owner Sandy Warren said that their business was no longer profitable due low prices being paid on materials sold for recycling, and she and her husband were ready to retire.

According to Mrs. Warren, AARC was staffed with approximately 10 full-time employees (averaging around \$8/hour). The facility was open Monday through Friday from 8 a.m. to 5 p.m., and from 9 a.m. to noon on Saturday. The work was labor intensive and required machinery such as a skid loaders and baling equipment. The equipment was prone to breaking down, and costs to run the business continued to climb.

### **Recycling**

While the Warrens did lock into contracts with vendors to purchase their products, market pricing was unpredictable. For example, from its peak at \$125 per ton for bundled cardboard, the most recent price was closer to \$45 per ton. The metals market was more stable, but represented a smaller portion of the business income. As part of its commitment to keep glass out of the waste stream, the City's Resource Recovery Plant paid the Warrens for glass (called a "glass avoidance fee"). Market fluctuations made this business model very unpredictable. Two to three years ago, faced with increasing costs and decreasing income, AARC implemented a fee of \$2 per car load to accept recycling.

### **Redemption**

Since its inception in 1979, the Iowa can and bottle bill (Iowa Code) has required a 5-cent deposit on cans, as well as some plastic and glass beverage containers. Redemption service works by collecting bottles and cans from consumers and reimbursing them for the

5-cent deposit paid. Redemption center employees then hand sort the product by distributor (Coke, Pepsi, Budweiser, Miller, etc.), and the distributors reimburse the redemption centers for the nickel deposit plus a 1-cent handling fee per item. The Warrens worked with 6 to 8 beverage distributors who would pick up product 1 to 3 times per week.

On a busy day, AARC would handle \$2,200 in redemptions (or 44,000 cans/bottles). On a slow day, that number would fall to \$1,000 to \$1,200 (or 20,000 or 24,000 cans/bottles). Product was stored at AARC until the distributors hauled it away.

Unlike grocery stores, AARC staff would take garbage bags and bins of bottles and cans from the hands of patrons, count them out, and provide the customer a cash payment. The customers were not required to touch the cans or bottles, to use automated machines, or to line up bottles/cans on flats for reimbursement. For AARC customers who only used the can and bottle service, there was no charge.

### **EFFECTS OF AARC'S CLOSURE**

AARC's closure has resulted in increases of can and bottle redemption services at local grocery stores. Both Fareway and both HyVee stores have indicated an increase in can and bottle redemption of 25-33%. These increases have made it challenging to keep redemption machines in working order and to provide storage space for the collected materials, due to the increased volume of the redemption service. Fareway had collected cans and bottles for redemption at their stores and then arranged with AARC for disposal. Both Fareways now contract with a redemption center in Perry to collect these materials after they've been turned into the grocery store for reimbursement.

Several local bars used AARC as a collection center for their bottles and cans. Some grocery store managers have reported that they have seen increases in the volume of glass bottles being deposited into the yellow glass recycling containers provided by the Resource Recovery System.

### **THE RESOURCE RECOVERY SYSTEM RECYCLES**

Since 1975, the Resource Recovery System has provided single-stream processing for materials recycling and fuel production. In this system, municipal solid waste is shredded, ferrous and non-ferrous metals are recovered for recycling, and the remaining burnable material becomes refuse-derived fuel (RDF). RDF offsets the use of fossil fuel in the Power Plant. This process has been improved over the years, resulting in 65 to 75 percent of the waste brought to the facility being reused as fuel or recycled. The non-burnable portion is sent to the landfill for disposal.

In 2006, the City of Ames initiated a program of free glass recycling to reduce the amount of glass in the waste stream due to its negative effects in both the Resource Recovery processing stream and the Power Plant boilers. Large yellow recycling bins were placed in local grocery store parking lots, where patrons used them to dispose of glass in the bins. Since its inception, the glass recycling program has diverted more than 1,222 tons of glass from the landfill. Glass is recycled for use in landscaping, industry, and construction.

## **OPTIONS CURRENTLY AVAILABLE**

There appear to be a number of options that are currently available to meet the redemption and recycling desires of Ames residents.

### **Redemption**

Bottle and can redemption options are currently provided in the community by local grocery and convenience stores. The service model may be different than AARC, but most of these businesses offer many more hours of operation than AARC provided. **In fact, businesses that sell bottles and cans that require deposits are required by State of Iowa law to provide redemption service for those products.**

### **Recycling**

Metals recycling is provided by the Resource Recovery Plant. Both ferrous and non-ferrous metals and cans are pulled from the waste stream during processing, and are sold for recycling.

Glass recycling is provided by the Resource Recovery Plant through the placement of yellow glass recycling bins located at area grocery stores. Glass is recycled for use in landscaping, industry, and construction. This service operates 24/7 through the use of unattended glass recycling bins.

Paper & Plastics recycling (white, mixed and paperboard, newspaper, cardboard, and plastics) may be available through a resident's current trash hauler or if a resident was willing to switch trash haulers. For example, Chitty Garbage charges an additional \$7 a month for recycling service. Waste Management offers a \$5 per monthly charge for picking up recyclables.

Haulers say the recycling fee is needed to cover the cost of additional trips to pick up the items. They charge the additional fee to recover fuel and trucking charges needed to transport the items to a transfer location where they are combined with items from other locations, and then shipped again to wherever they may be made into other products. As AARC discovered, the recycling markets are not as attractive as they had been in the past making the monthly fees necessary. Recycling service is not available to residents who choose not to contract for trash collection or some apartment tenants whose landlord opts not pay for the additional recycling service.

## **OPTIONS FOR REDEMPTION**

Should the City Council believe that the services that currently exist for redemption are insufficient, the following options could be considered.

### **1. Recruit A Private Vendor To Ames To Provide Redemption Service**

The City could engage in an active process to recruit a redemption service using a similar process of marketing Ames to attract other types of business to the community. This option could involve some type of up-front or ongoing incentive.

## **2. City Assumes Responsibility For Redemption Service**

Before committing to this option, additional in-depth analysis must be performed to clarify the following issues:

- **How Many Staff Members Are Needed?**

Based on Sandy Warren's input, an additional 4 to 5 full-time employees would be needed for this service. While AARC paid an average of \$8/hour to full-time staff, a comparable City position would cost \$18.38/hour or \$38,230 per year. Some of this employee complement could be comprised of part-time, non-benefitted positions that are currently paid at \$10.50.

- **How Many Hours of Operation?**

It will not be possible to match the service level of some of the area grocery stores that are open 24/7. AARC provided 48 hours per week of service. A determination will have to be made regarding the number of hours the operation should be open.

- **What Is the Appropriate Subsidy Level?**

Mrs. Warren advised that this type of operation will require some level of subsidy, because the 5-cent deposit and 1-cent handling fee has not changed since 1979. However, rent, utilities, insurance, equipment, and labor costs have continued to increase, making it difficult to run a successful redemption center business. The Warrens were able to cash flow the redemption center when the recycling markets were profitable. Many businesses pair their redemption operation with another service to remain financially viable.

- **At What Location Will This Service Be Provided?**

A redemption facility requires product sorting and storage space, storage for equipment, secured space for cash, patron parking, and delivery truck access. Various City of Ames facilities have components of these needs, but no one property can currently meet all of them. According to Mrs. Warren, a 4,000-square-foot building would be adequate for providing this service.

## **OPTIONS FOR RECYCLING**

Should the City Council believe that the services that currently exist for recycling are insufficient, the following options could be considered.

### **1. Recruit An Existing Vendor To Ames To Provide Recycling Service**

The City could engage in an active process to recruit a recycling service using a similar process of marketing Ames to attract other types of business to the community. This option could involve some type of up-front or ongoing incentive.

### **2. Partnership With Iowa State University**

Iowa State University contracts with vendors to pick up white paper, newspaper, mixed paper, cardboard, plastics, glass, and metals for recycling. These products are collected on campus, and a vendor regularly hauls away recyclables. In preliminary discussions with Iowa State University, allowing residents to use university recycling was identified as a “possibility to explore.”

In this option, Iowa State University would allow Ames residents to use ISU paper, cardboard, and plastic recycling options on campus. This would require discussion and negotiation at the administrative level of both organizations to determine how this service would be managed and compensated.

#### **○ What Would Be The Cost Of This Option?**

The cost of this partnership option would need to be determined after conversations with ISU administration and purchasing specialists.

### **3. City Assumes Responsibility For Recycling Through Recycling Bins**

Stand alone recycling bins could be located on private or public property and offer 24-hour access to recycling. It might be possible to identify one, centralized public space for this service, or this concept could be modeled after the current glass-recycling option with multiple locations. Adding paper or plastic to the glass recycling bins would provide an option for recycling, but also creates some challenges.

#### **○ What Impact Will This Option Have On The Resource Recovery Plant?**

If unattended drop-off service is offered at no cost, the City would be in competition with the private sector businesses who offer this service and with itself (the Resource Recovery Plant). If successful, the Resource Recovery Plant could see a reduction in revenues necessitating an increase in subsidy needs. In addition, paper and plastic are good sources of high-BTU product at the Resource Recovery Plant, so these bins would divert products that could otherwise offset the use of fossil fuel in the Power Plant.

- **What Are Operational Costs Of This Option?**

Sorted paper and plastic would need to be transported to a facility that accepts these products for recycling. Drop-off recycling bins do not provide options to recover costs. As is the risk for glass recycling, unattended bins can be contaminated. Proposals would have to be sought in order to determine the one-time and on-going costs of this option.



*One option would be to ask grocery stores to consider adding additional stand alone recycling bins to the ones already placed in parking lots. The photo above shows two City of Ames glass recycling bins and a non-City clothing recycling drop box.*